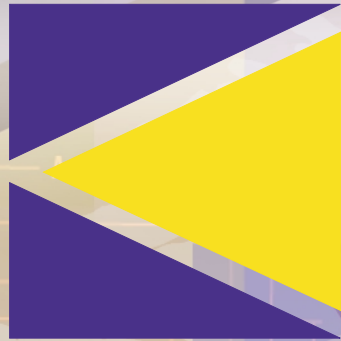
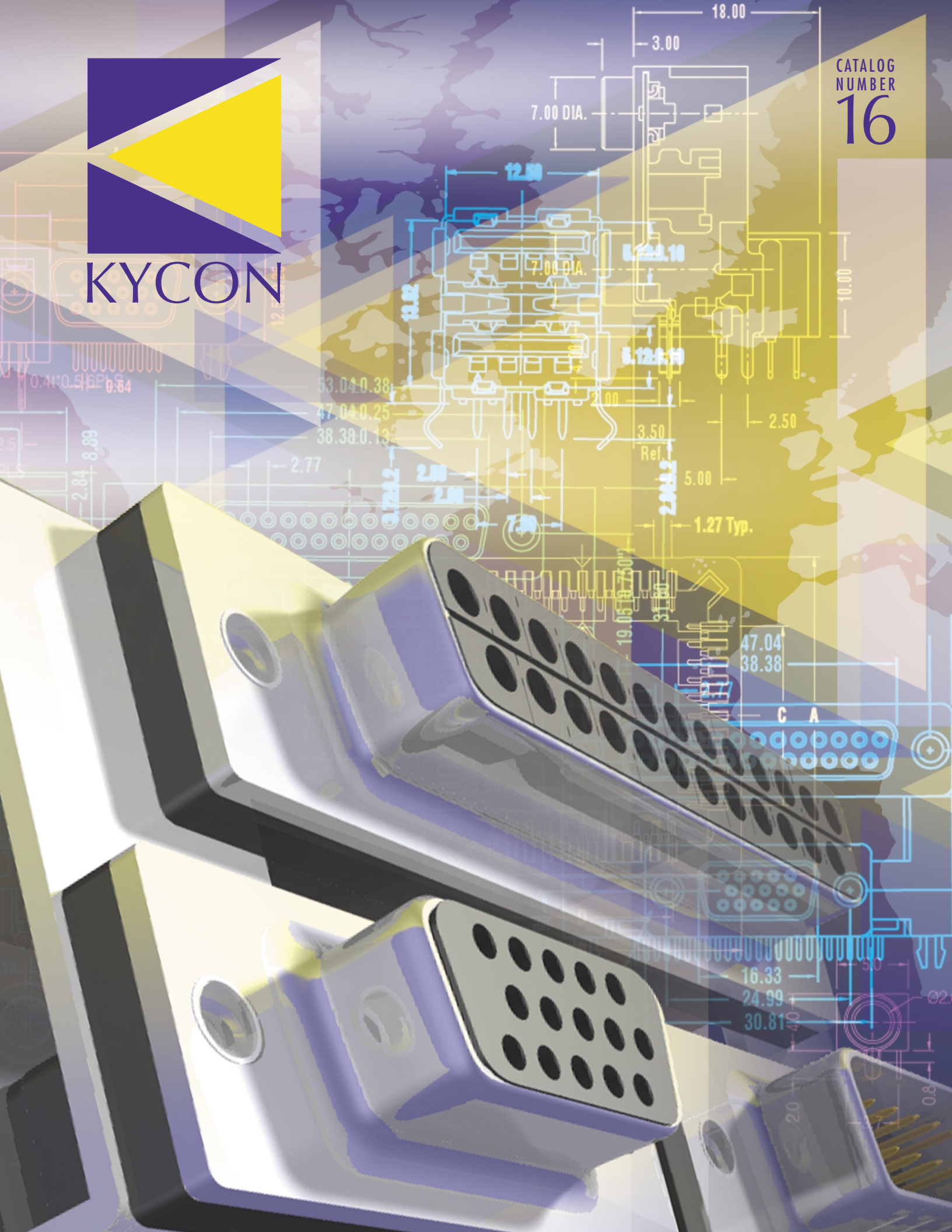




KYCON

CATALOG  
NUMBER

16



**KYCON continues its leadership in connectors by offering a complete line of sizes and options.**

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- Multi Port
- Ferrite
- Hardware



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**39**

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**83**

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**99**

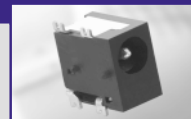
- 2.5mm & 3.5mm
- Surface Mount & Through Hole
- Low Profile, Slim, Stacked & Panel Mount
- RCA Phono Jacks



#### **DC Power Connectors**

**119**

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- Surface Mount & Through Hole
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**130**

- Edge Card Connectors
- DIMM Sockets
- SCART Connectors
- Miniature Ribbon Connectors
- Chip Carrier Sockets



***KYCON continues its leadership in innovative connector design by offering a number of design alternatives.***

## DESIGN CHALLENGES

### *Kycon Solutions*

#### ***Surface Mount Connectors***

As more and more PC board production is moving to SMT, Kycon is adding surface mount designs to many of its connector lines. Connectors currently available in surface mount are USB, mini-USB, IEEE 1394, D-sub, modular jacks, chip carrier sockets, DC power jacks, audio jacks, and mini-DINs.



#### ***PC99***

Kycon's PC99 connectors meet the Design System Guidelines for PC systems and components. The colors assigned to each connector are defined by its function within the PC or peripheral and help end users properly connect and configure their system.



#### ***Reflow Compatible Connectors***

Although PC board production is changing to surface mount assembly, many connectors are ill suited for adaptation to SMT designs. Kycon has developed a line of leaded connectors compatible with reflow soldering processes to help simplify the assembly process on SMT boards.



#### ***Shielded Connectors***

Electronics equipment designers have been concerned with electromagnetic interference (EMI) ever since unwanted signals were first found to interfere with electronic performance. To prevent problems associated with EMI/RFI transmissions, Kycon has developed a number of products with varying shield options.



#### ***Ferrite Connectors***

For PC board manufacturers who require additional filtering of EMI/RFI transmissions, but don't want to redesign their board layout, Kycon's ferrite D-sub, Modular Jacks and Mini-DINs provide an easy, cost effective way of reducing both radiated and conducted interference.



#### ***High Frequency I/O Connectors***

As the demand for faster and cleaner data transfer increases, Kycon has added more connectors to its line of High Frequency I/O Connectors. In addition to the standard high speed I/O bus connectors, such as SCSI, USB and IEEE 1394, Kycon also offers the ultra-small Mini-USB for hand held devices, and the DVI for storing and displaying moving video images.



#### ***Custom Connectors***

Kycon develops many connectors to meet specific customer applications. Through the modification of existing products, Kycon is able to quickly and cost effectively produce custom connectors to meet individual needs.



**KYCON continues its leadership in D-Subminiature Connectors by offering a complete line of sizes and options.**

### Features:

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls and Local Area Networks
- Bright Tin shells for exceptional conductivity, grounding and EMI/RFI Shielding
- PC99 Colors available
- Indentations (dimples) on plug shells for exceptional grounding and mating retention
- Plug and Socket available in 9, 15, 25, and 37 positions
- High-Density available in 15, 26, 44, and 62 positions
- All stamped socket pins are Phosphor Bronze for superior contact retention.
- Design meets the requirements of MIL-C-24308, EIA RS-232 and RS-449
- UL Recognized File No. E140125
- CSA/NRTL Certified File No. LR78160

### Performance:

- See page 4 for performance specifications



## D-SUBMINIATURE CONNECTORS

### Directory

#### Right Angle P.C.B. Mount

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|--------------------------------------------|-----------|
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#### Vertical P.C.B. Mount

|                           |           |
|---------------------------|-----------|
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| <b>K86 - High Density</b> | <b>16</b> |
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#### Cable Connectors

|                                      |           |
|--------------------------------------|-----------|
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| <b>K86 - Soldercup, High Density</b> | <b>16</b> |
| <b>K99 - IDC</b>                     | <b>19</b> |



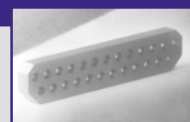
#### Multiport

|                                    |           |
|------------------------------------|-----------|
| <b>K42 - Dual Port</b>             | <b>22</b> |
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#### Ferrite

|                                             |           |
|---------------------------------------------|-----------|
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#### Hardware / Mounting Options

|                             |           |
|-----------------------------|-----------|
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**KYCON continues its leadership in D-Subminiature connectors by offering a complete line of sizes and options.**

**PC99 Colors Available:**

- HD15: Blue
- DB15: Gold
- DB25: Burgundy
- DB09: Teal



## D-SUBMINIATURE CONNECTORS

### Performance Specifications

#### Materials and Finish

**Shell**

Steel Material, Tin Finish, and Indentations (Dimples) on Plug Only

**Insert**

Standard: PBT Thermoplastic, Black Color, 30% Glass Filled, 94V-0 Rated  
Reflow Compatible: High Temperature Thermoplastic, Black Color, 30% Glass Filled, 94V-0 Rated

**Contact Material**

Pin: Brass .040 (1.02) Diameter Standard; .030 (0.76) Diameter High Density  
Socket: Phosphor Bronze (Precision Formed Contact)  
Brass (Precision Machined Contact)

**Contact Finish-Standard**

Gold Flash Over 0.0001 (0.00254) Nickel on Mating End of Contacts  
Tin/Lead Over Nickel or Gold Flash Over Nickel on Solder Tails

**Riveted Insert**

Brass Material, Nickel Finish

#### Mechanical Characteristics

**Contact Retention**

Precision Machined Contact 10 Lbs, Precision Formed Contact 10 Lbs

**Contact Extraction Force**

Typ. 4 Oz.

**Contact Insertion Force**

Typ. 9 Oz.

**Durability**

1,000 Insertion Cycles Min (With Standard Plating)

**Operating Temperature Rating**

-55°C to +125°C

#### Electrical Characteristics

**Contact Current Rating**

Precision Machined Contact 7.6 Amps  
Precision Formed Contact 5.0 Amps (Except K99 Series)

**Contact Resistance**

Precision Machined Contact 5 Milliohms Max  
Precision Formed Contact 8 Milliohms Max

**Dielectric Withstanding Voltage**

1000 V AC Min for 1 Minute

**Insulation Resistance**

5000 Megohms Min

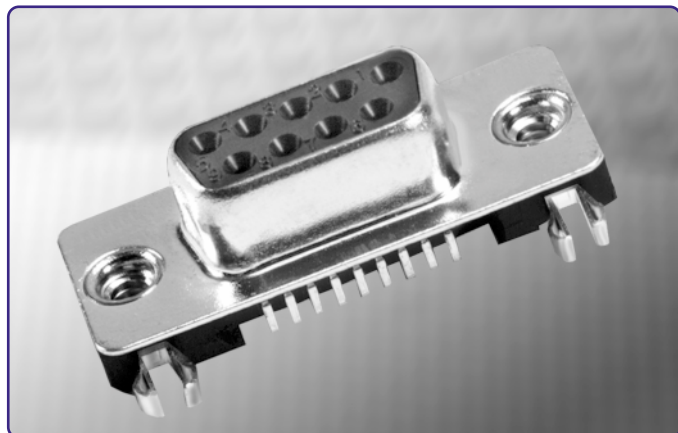
#### Processing Characteristics

**Soldering Temperature Rating**

High Temperature Plastic: 230°C for 30 Seconds, 260°C for 10 Seconds

#### Plating Options

| Designator | Plating Description                                                                                 |
|------------|-----------------------------------------------------------------------------------------------------|
| Standard   | Gold Flash over Nickel on Contacts. Gold Flash over Nickel or Tin/Lead over Nickel on Solder Tails. |
| 15         | 15µ" Gold over Nickel on Mating End of Contacts. Tin/Lead over Nickel on Solder Tails.              |
| 30         | 30µ" Gold over Nickel on Mating End of Contacts. Tin/Lead over Nickel on Solder Tails.              |



## K202HT Series Right Angle Surface Mount

### Ordering Information

|        |   |               |   |                 |   |                 |
|--------|---|---------------|---|-----------------|---|-----------------|
| K202HT | — | E9S           | — | N               | — |                 |
| Series |   | Configuration |   | Mounting Option |   | Plating Options |

#### Series

K202HT - Kycon D-Subminiature Connector, Right Angle, Ultra Short Footprint, Surface Mount, Reflow Compatible

#### Configuration

E9S - 9 Socket Contacts (Receptacle)

E9P - 9 Pin Contacts (Plug)

B25S - 25 Socket Contacts (Receptacle)

B25P - 25 Pin Contacts (Plug)

E15S - 15 Socket Contacts High Density (Receptacle)\*

#### Mounting Options

N - With Board Locks and (4-40) Riveted Threaded Inserts

NJ - With Board Locks, Riveted Threaded Inserts, and 4-40 Hex. Jack Screws Assembled to Connector

#### Plating Options

| Designator | Plating Description                                                                   |
|------------|---------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails.              |
| 15         | 15μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |
| 30         | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |

#### Performance Specifications (see page 4)

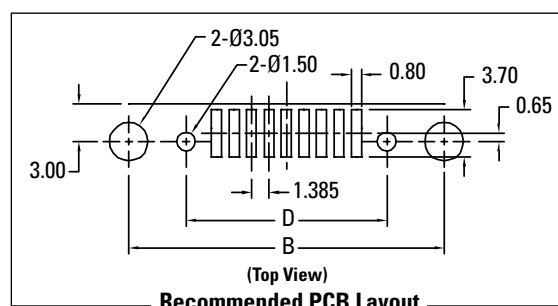
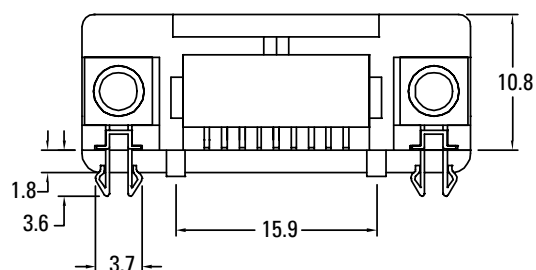
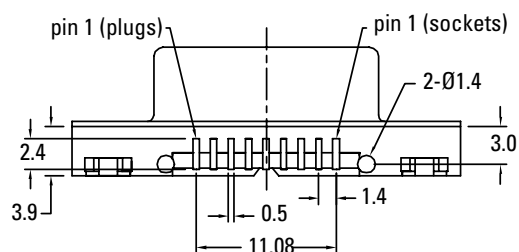
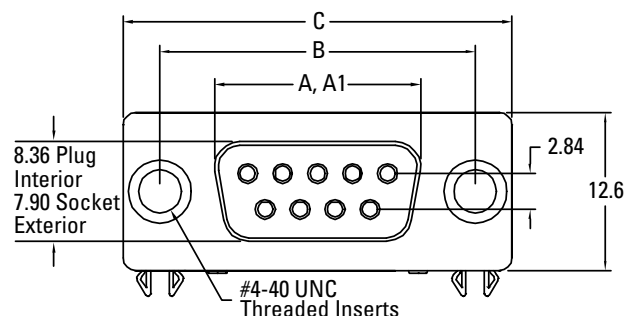
\*Contact factory for specifications. 888-KYCON-22

## D-SUBMINIATURE CONNECTORS

### K202HT Series

### K202HT Series Dimensions

Dimensions in mm



(Top View)  
Recommended PCB Layout

| Shell Size | A              | A1             | B              | C              | D              |
|------------|----------------|----------------|----------------|----------------|----------------|
| In         |                |                |                |                |                |
| mm         |                |                |                |                |                |
| 9 (E)      | ±.010<br>±0.25 | ±.010<br>±0.25 | ±.005<br>±0.13 | ±.015<br>±0.38 | ±.005<br>±0.13 |
| 15 (E)     | .643<br>16.33  | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .626<br>15.90  |
| 25 (B)     | 1.511<br>38.38 | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.498<br>38.06 |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)



## K22 Series Right Angle PCB Mount .318" Footprint

### Ordering Information

| K22    | - | B          | 25                 | S            | - | N                |                 |
|--------|---|------------|--------------------|--------------|---|------------------|-----------------|
| Series |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |

#### Series

K22 - Kycon D-Subminiature Connector, Right Angle, PCB Termination, .318 Footprint  
K22HT - Reflow Compatible Version

#### Shell Size

E - 9 Contacts  
A - 15 Contacts  
B - 25 Contacts  
C - 37 Contacts

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P - Pin Contact (Plug)  
S - Socket Contact (Receptacle)

#### Mounting Options (See Page 35)

#### Plating Options

| Designator | Plating Description                                                                                |
|------------|----------------------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts. Gold flash over nickel or tin/lead over nickel on soldertails. |
| 15         | 15µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |
| 30         | 30µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |

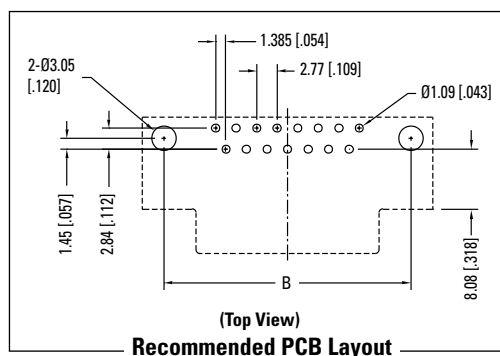
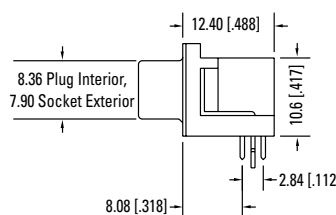
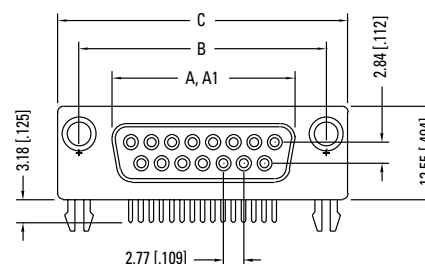
#### Performance Specifications (see page 4)

## D-SUBMINIATURE CONNECTORS

### K22 Series

### K22 Series Dimensions

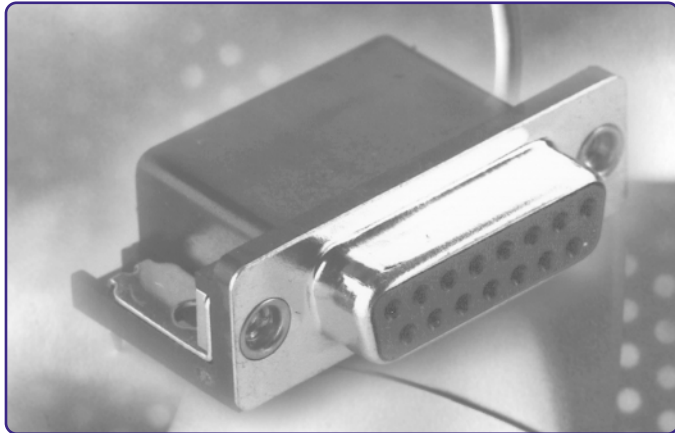
Pictured with Board Lock Option, Dimensions in mm [In]



| Shell Size<br>In<br>mm | A<br>±.010<br>±0.25 | A1<br>±.010<br>±0.25 | B<br>±.005<br>±0.13 | C<br>±.015<br>±0.38 |
|------------------------|---------------------|----------------------|---------------------|---------------------|
| 9<br>(E)               | .643<br>16.33       | .666<br>16.92        | .984<br>24.99       | 1.213<br>30.81      |
| 15<br>(A)              | .971<br>24.66       | .994<br>25.25        | 1.312<br>33.32      | 1.541<br>39.14      |
| 25<br>(B)              | 1.511<br>38.38      | 1.534<br>38.96       | 1.852<br>47.04      | 2.088<br>53.04      |
| 37<br>(C)              | 2.159<br>54.84      | 2.182<br>55.42       | 2.500<br>63.50      | 2.729<br>69.32      |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)



## K44 Series Right Angle PCB Mount .590" Footprint

### Ordering Information

| K44    | - | B          | 25                 | S            | - | P                |                 |
|--------|---|------------|--------------------|--------------|---|------------------|-----------------|
| Series |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |

#### Series

K44 - Kycon D-Subminiature Connector, Right Angle, PCB Termination, .590 Footprint

#### Shell Size

E - 9 Contacts  
A - 15 Contacts  
B - 25 Contacts  
C - 37 Contacts

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P - Pin Contact (Plug)  
S - Socket Contact (Receptacle)

#### Mounting Options (see page 36)

#### Plating Options

| Designator | Plating Description                                                                                |
|------------|----------------------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts. Gold flash over nickel or tin/lead over nickel on soldertails. |
| 15         | 15μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |
| 30         | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |

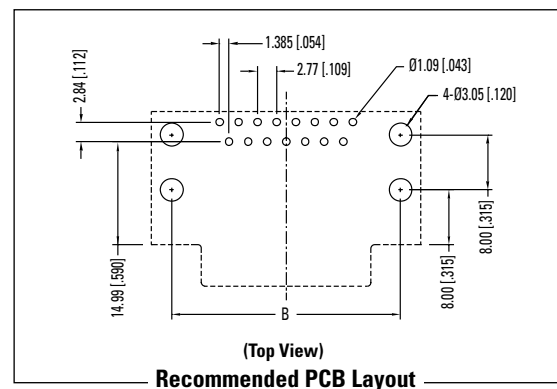
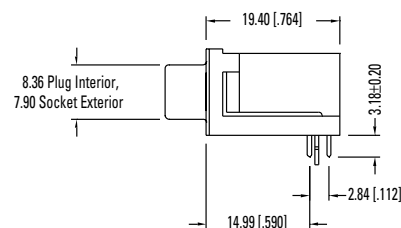
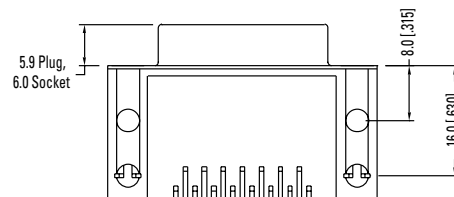
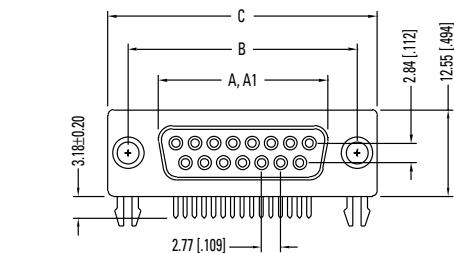
#### Performance Specifications (see page 4)

## D-SUBMINIATURE CONNECTORS

### K44 Series

### K44 Series Dimensions

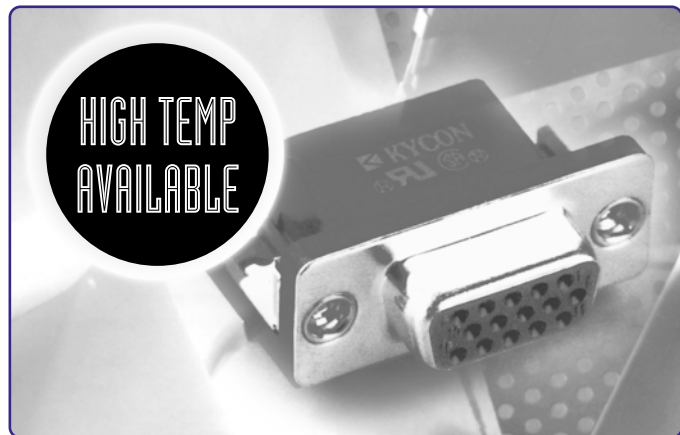
Pictured with Board Lock Option, Dimensions in mm [In]



| Shell Size<br>In<br>mm | A<br>±.010<br>±0.25 | A1<br>±.010<br>±0.25 | B<br>±.005<br>±0.13 | C<br>±.015<br>±0.38 |
|------------------------|---------------------|----------------------|---------------------|---------------------|
| 9<br>(E)               | .643<br>16.33       | .666<br>16.92        | .984<br>24.99       | 1.213<br>30.81      |
| 15<br>(A)              | .971<br>24.66       | .994<br>25.25        | 1.312<br>33.32      | 1.541<br>39.14      |
| 25<br>(B)              | 1.511<br>38.38      | 1.534<br>38.96       | 1.852<br>47.04      | 2.088<br>53.04      |
| 37<br>(C)              | 2.159<br>54.84      | 2.182<br>55.42       | 2.500<br>63.50      | 2.729<br>69.32      |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)



## K66 Series High Density Right Angle PCB Mount

### Ordering Information

| K66    | — | E          | 15                 | S            | — | N                | 15              | — | VESA         |
|--------|---|------------|--------------------|--------------|---|------------------|-----------------|---|--------------|
| Series |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |   | VESA Options |

#### Series

K66 - Kycon High Density D-Subminiature Connector,  
Right Angle PCB Termination, .350 Footprint  
K66HT - Reflow Compatible Version

#### Shell Size, Number of Contacts

E-15 Contacts  
A-26 Contacts  
B-44 Contacts  
C-62 Contacts

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options (See page 35)

#### Plating Options and Performance Specifications (See page 4)

#### VESA Options (15 Pin Receptacle Only)

Blank-Standard  
VESA - VESA Compliant Version

### VESA Features

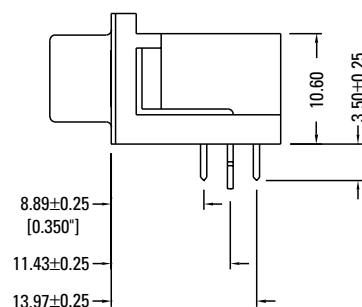
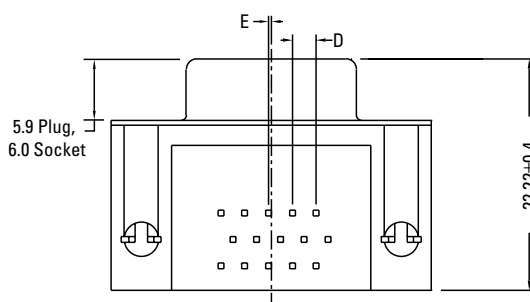
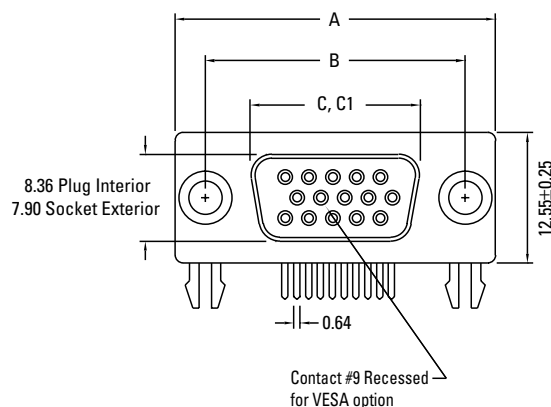
- Right Angle PCB Termination, 15 Pin Receptacle, .350 Footprint
- Contact #9 Recessed 0.050" (1.27mm) to Allow Last Mate/First Break on 5V Supply Voltage
- Blue PBT Insulator Signifies 5V Capability and Full Feature AccessBus Capability in Accordance with Video Electronics Standard Association (VESA)
- Meets Display Data Channel (DDC) Standard

## D-SUBMINIATURE CONNECTORS

### K66 Series

### K66 Series Dimensions

Pictured with Board Lock Option, Dimensions in mm



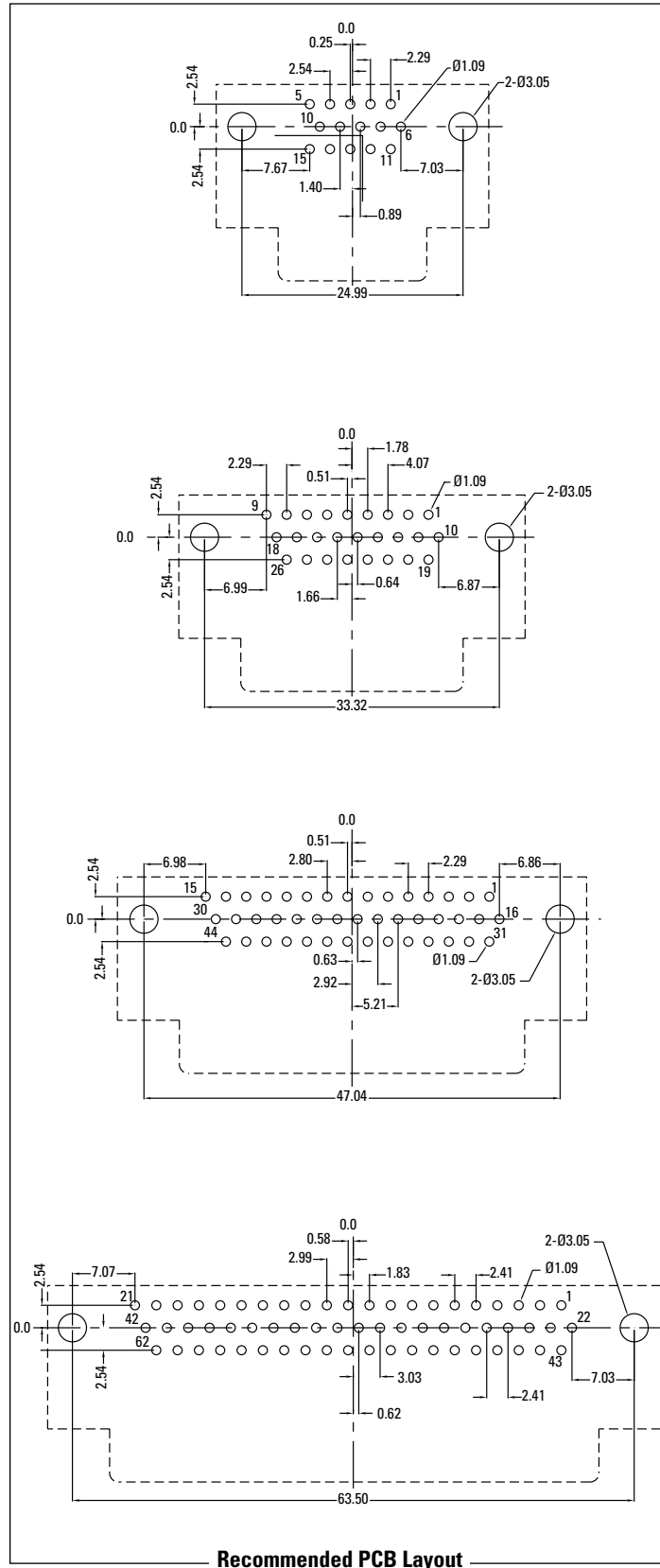
| Shell Size | A              | B              | C              | C1             | D            | E            |
|------------|----------------|----------------|----------------|----------------|--------------|--------------|
| In         | ± .015         | ± .005         | ± .010         | ± .010         | ± .005       | ± .005       |
| mm         | ± 0.38         | ± 0.13         | ± 0.25         | ± 0.25         | ± 0.13       | ± 0.13       |
| 15 (E)     | 1.213<br>30.81 | .984<br>24.99  | .643<br>16.33  | .666<br>16.92  | .090<br>2.29 | .010<br>0.25 |
| 26 (A)     | 1.541<br>39.14 | 1.312<br>33.32 | .971<br>24.66  | .994<br>25.25  | .090<br>2.29 | .020<br>0.51 |
| 44 (B)     | 2.088<br>53.04 | 1.852<br>47.04 | 1.511<br>38.38 | 1.534<br>38.96 | .090<br>2.29 | .020<br>0.51 |
| 62 (C)     | 2.729<br>69.32 | 2.500<br>63.50 | 2.159<br>54.84 | 2.182<br>55.42 | .095<br>2.41 | .023<br>0.58 |

C = Exterior of Female Shell (S)

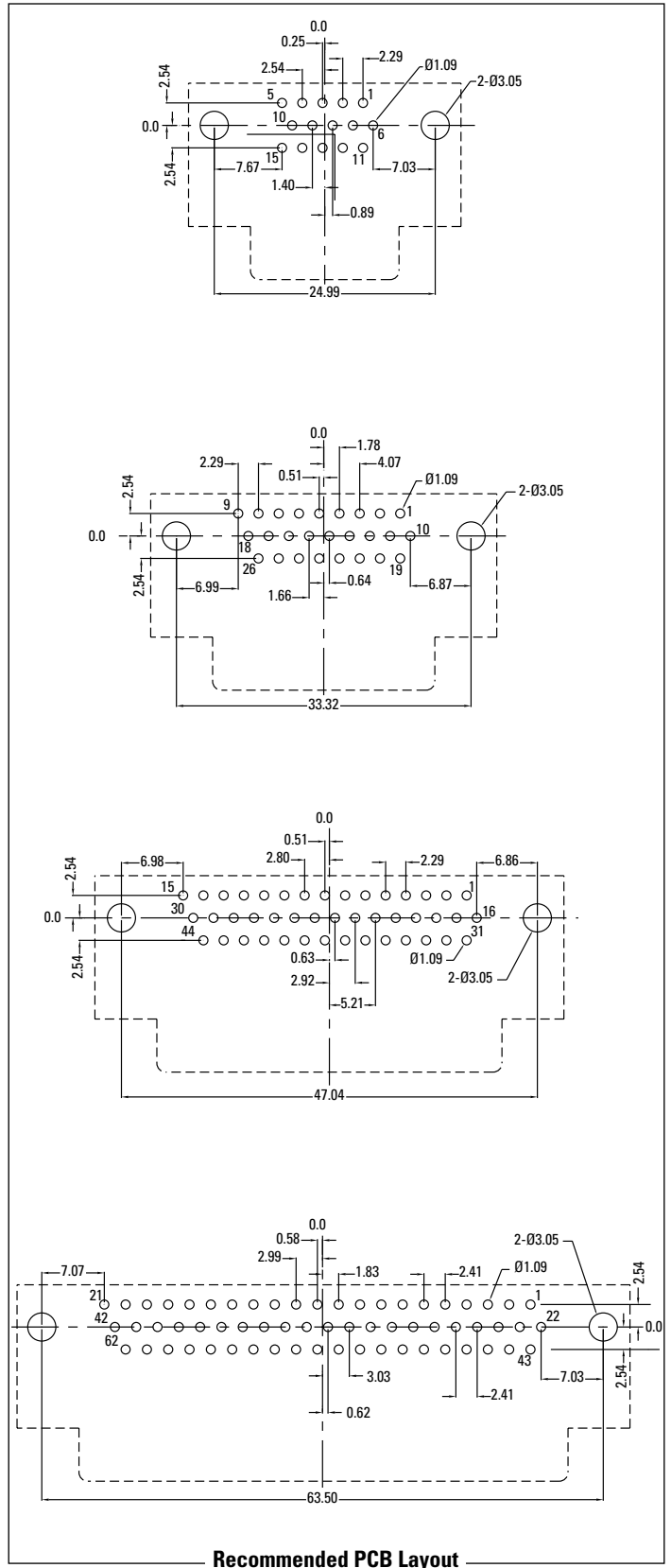
C1 = Interior of Male Shell (P)

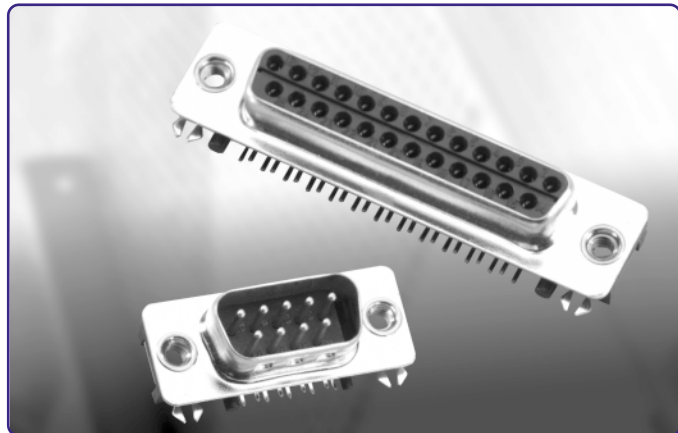


**Female (Receptacle): Top View**



**Male (Plug): Bottom View**





## K31 Series Right Angle PCB Mount Ultra Compact Footprint

### Ordering Information

|        |   |               |   |                  |   |               |                 |
|--------|---|---------------|---|------------------|---|---------------|-----------------|
| K31    | — | A15S          | — | N                | — |               |                 |
| Series |   | Configuration |   | Mounting Options |   | Other Options | Plating Options |

#### Series

K31 - Kycon D-Subminiature Connector, Right Angle, PCB Termination, Ultra Compact Footprint  
K31HT - Reflow Compatible Version

#### Configuration

E9P - 9 Pin Contacts (Plug)  
E9S - 9 Socket Contacts (Receptacle)  
A15S - 15 Socket Contacts (Receptacle)  
B25S - 25 Socket Contacts (Receptacle)  
E15S - 15 Socket Contacts High Density (Receptacle)

#### Mounting Options

N - With Board Locks and 4-40 Riveted Threaded Inserts  
NJ - With Board Locks, Riveted Threaded Inserts and 4-40 Hex. Jack Screws Assembled to Connector

#### Other Options

Blank - Standard  
ESD - With Electrostatic Discharge Bar (25 pin only)

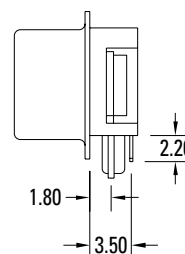
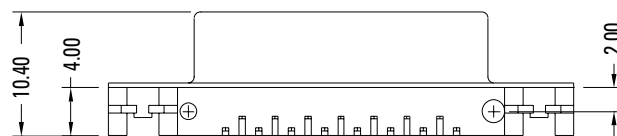
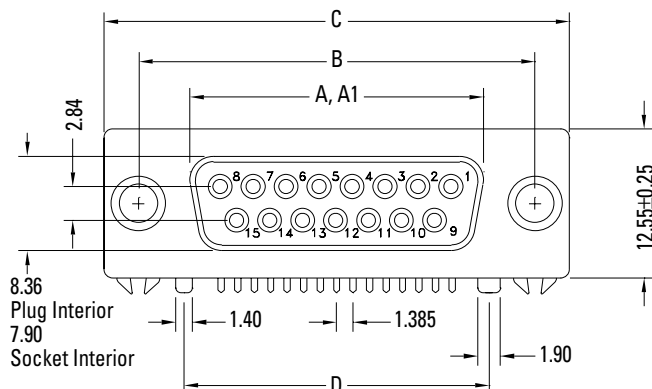
#### Plating Options

| Designator | Plating Description                                                                                |
|------------|----------------------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts. Gold flash over nickel or tin/lead over nickel on soldertails. |
| 15         | 15µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |
| 30         | 30µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.              |

**Performance Specifications** (see page 4)

## D-SUBMINIATURE CONNECTORS

### K31 Series



| Shell Size<br>In mm | A<br>±.010<br>±0.25 | A1<br>±.010<br>±0.25 | B<br>±.005<br>±0.13 | C<br>±.015<br>±0.38 | D<br>±.005<br>±0.13 |
|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| 9<br>(E)            | .643<br>16.33       | .666<br>16.92        | .984<br>24.99       | 1.213<br>30.81      | .551<br>14.00       |
| 15<br>(A)           | .971<br>24.66       | —                    | 1.312<br>33.32      | 1.541<br>39.14      | 1.009<br>25.64      |
| 25<br>(B)           | 1.511<br>38.38      | —                    | 1.852<br>47.04      | 2.088<br>53.04      | 1.557<br>39.54      |

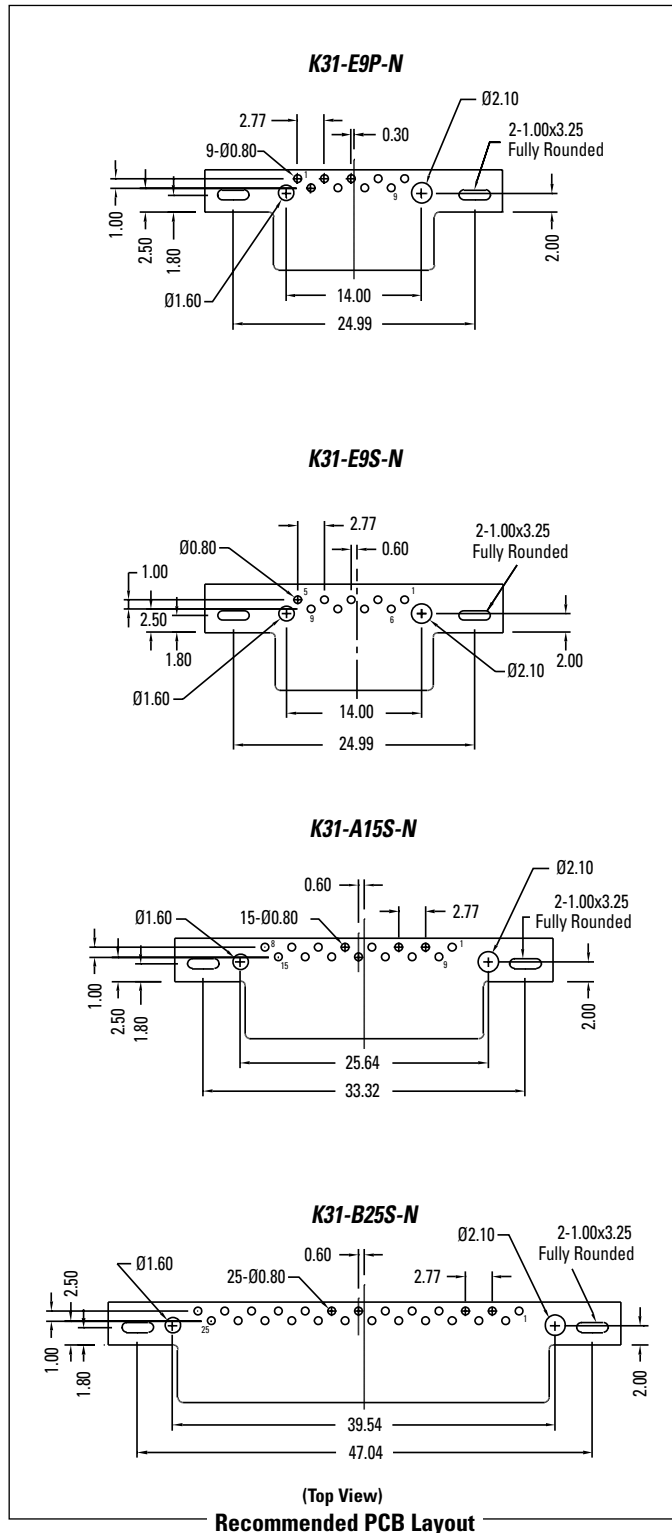
**A = Exterior of Female Shell (S)**

**A1 = Interior of Male Shell (P)**



## K31 Series Dimensions

Dimensions in mm

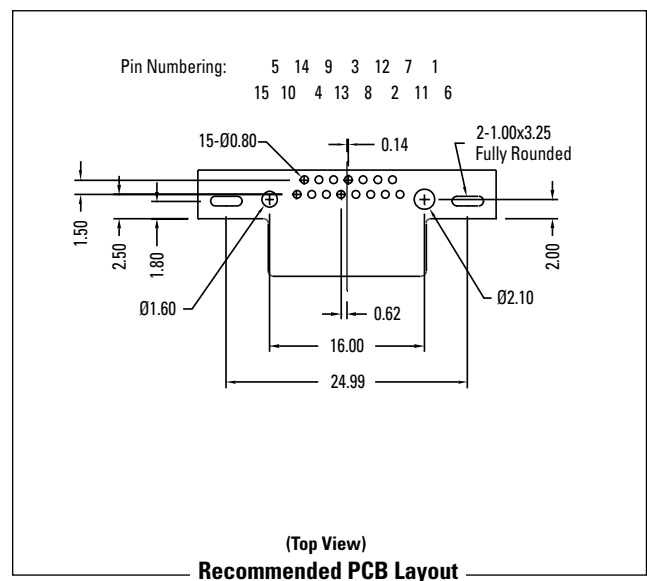
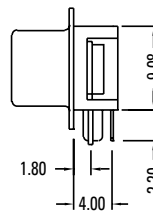
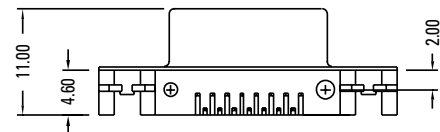
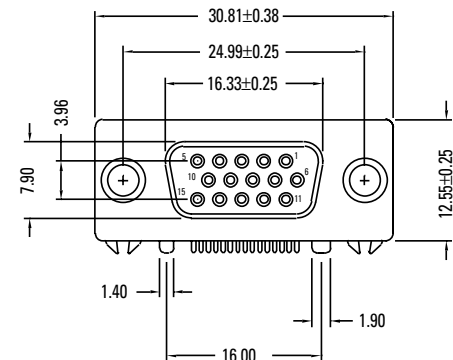


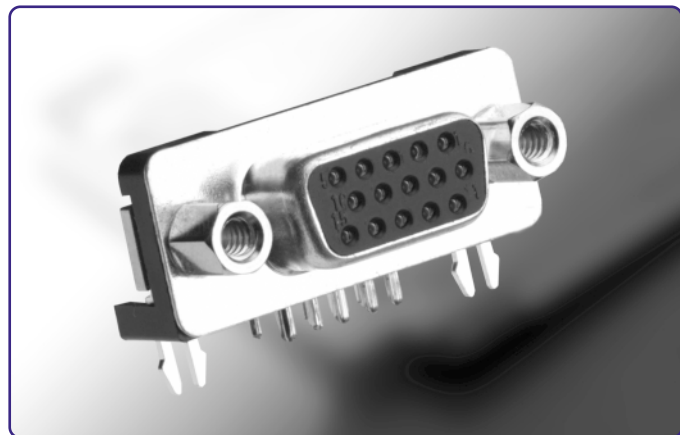
## D-SUBMINIATURE CONNECTORS

### K31 Series

## K31-E15S-N

Dimensions in mm





## K61 Series High Density Right Angle PCB Mount Compact Footprint

### Features

- 15 Pin High Density D-Subminiature Receptacle, Right Angle PCB Termination, Compact Footprint
- Available in Reflow Compatible, High Temperature Plastic

### VESA Features

- Contact #9 Recessed 0.050" (1.27mm) to Allow Last Mate/First Break on 5V Supply Voltage
- Blue PBT Insulator Signifies 5V Capability and Full Feature AccessBus Capability in Accordance with Video Electronics Standard Association (VESA)
- Meets Display Data Channel (DDC) Standard

### Ordering Information

|        |            |                    |              |                 |                 |             |   |  |
|--------|------------|--------------------|--------------|-----------------|-----------------|-------------|---|--|
| K61    | -          | E                  | 15           | S               | -               | N           | - |  |
| Series | Shell Size | Number of Contacts | Contact Type | Mounting Option | Plating Options | VESA Option |   |  |

#### Series

K61 - Kycon High Density D-Subminiature Connector, Right Angle PCB Termination  
K61HT - Reflow Compatible Version

#### Shell Size, Number of Contacts

E-15 Contacts

#### Contact Type

S-Socket Contact (Receptacle)

#### Plating Options and Performance Specifications (see page 4)

#### VESA Option (15 Pin Receptacle Only)

Blank-Standard

VESA - VESA Compliant Version

#### Mounting Option

N - With Board Locks and 4-40 Riveted Threaded Inserts

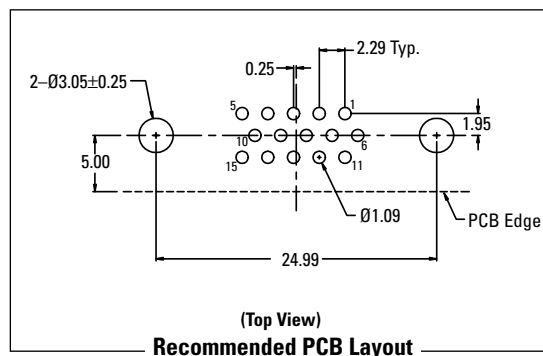
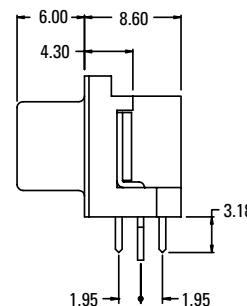
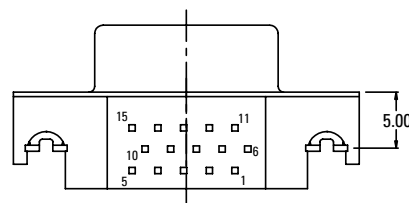
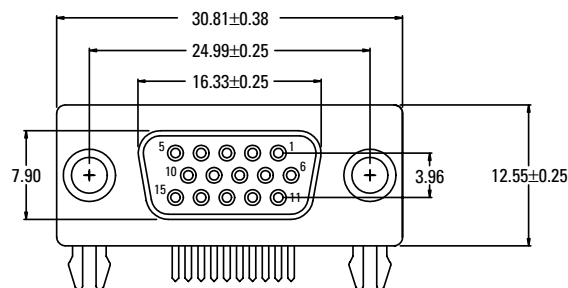
NJ - With Board Locks, Riveted Threaded Inserts and 4-40 Hex. Jack Screws Assembled to Connector

## D-SUBMINIATURE CONNECTORS

### K61 Series

### K61 Series Dimensions

Dimensions in mm





## K85R1/K85R2 Series Right Angle PCB Mount Open Body

### Ordering Information

|        |   |               |  |                         |   |                       |  |                 |   |                     |  |                    |
|--------|---|---------------|--|-------------------------|---|-----------------------|--|-----------------|---|---------------------|--|--------------------|
| K85R1  | - | E             |  | D                       | - | 9                     |  | S               | - | N                   |  |                    |
| Series |   | Shell<br>Size |  | Contact<br>Construction |   | Number of<br>Contacts |  | Contact<br>Type |   | Mounting<br>Options |  | Plating<br>Options |

#### Series

K85R1 - Kycon D-Subminiature Connector, Right Angle PCB Termination .283" (7.2 mm) Foot Print

K85R2 - Kycon D-Subminiature Connector, Right Angle PCB Termination .370" (9.4 mm) European Foot Print

#### Shell Size

E - 9 Contacts  
A - 15 Contacts  
B - 25 Contacts  
C - 37 Contacts

#### Contact Construction

D - Precision Formed Right Angle

#### Number of Contacts

9, 15, 25, 37

#### Pin Contact Type

P - Pin Contact (Plug)  
S - Socket Contact (Receptacle)

**Plating Options and Performance Specifications**  
(see page 4)

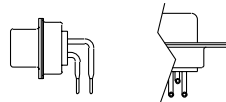
## D-SUBMINIATURE CONNECTORS

### K85R1 / K85R2 Series

### Mounting Options \*

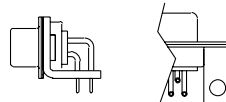
\*Metric Jack Screws also available. (see page 38)

No Designator - No Mounting Brackets



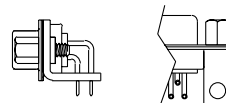
**0 -**

Mounting Brackets with .120" Dia. Non-Threaded Mounting Holes and Riveted Threaded Inserts



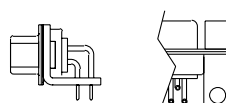
**0J -**

Mounting Brackets with .120" Dia. Non-Threaded Mounting Holes and Riveted Threaded Inserts with JS-1000 4-40 Hex Jackscrews Installed



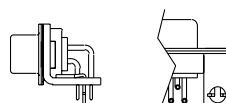
**OR -**

Mounting Brackets with .120" Dia. Non-Threaded Mounting Holes with 4-40 Round Jackscrews Riveted to Connector



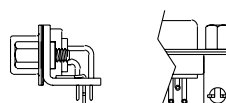
**N -**

Mounting Brackets with Grounding Boardlocks and Riveted Threaded Inserts



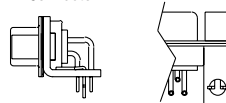
**NJ -**

Mounting Brackets with Grounding Boardlocks and Riveted Threaded Inserts with JS-1000 4-40 Hex Jackscrews Installed



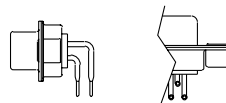
**NR -**

Mounting Brackets with Grounding Boardlocks and Riveted Threaded Inserts with 4-40 Round Jackscrews Riveted to Connector



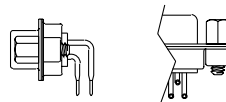
**K -**

(No Mounting Brackets) Riveted Threaded 4-40 Bushings



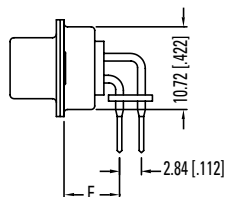
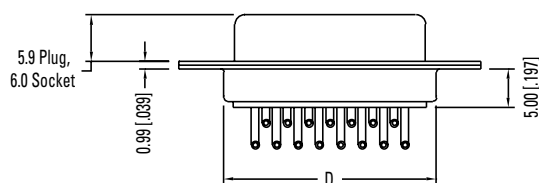
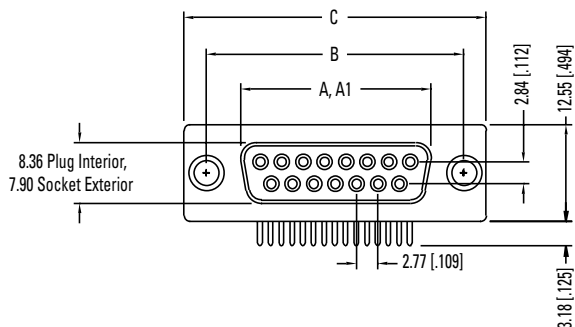
**KJ -**

(No Mounting Brackets) Riveted Threaded 4-40 Bushings with JS-1000 4-40 Hex Jackscrews Installed



## K85R1/K85R2 Dimensions

Standard with No Mounting Brackets



Dimensions in mm [In]

| Number of Contacts (Shell Size) | Dimensions (Inch/mm) K85R1/K85R2 |                |                |                |                |
|---------------------------------|----------------------------------|----------------|----------------|----------------|----------------|
|                                 | A                                | A1             | B              | C              | D              |
| 9 (E)                           | .643<br>16.33                    | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .795<br>20.19  |
| 15 (A)                          | .971<br>24.66                    | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | 1.083<br>27.51 |
| 25 (B)                          | 1.511<br>38.38                   | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.652<br>41.96 |
| 37 (C)                          | 2.159<br>54.84                   | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | 2.272<br>57.71 |

| Series | E Dimension  | F Dimension    |
|--------|--------------|----------------|
| K85R1  | 7.2mm (.283) | 8.62mm (.339)  |
| K85R2  | 9.4mm (.370) | 10.82mm (.425) |

**A = Exterior of Female Shell (S)**

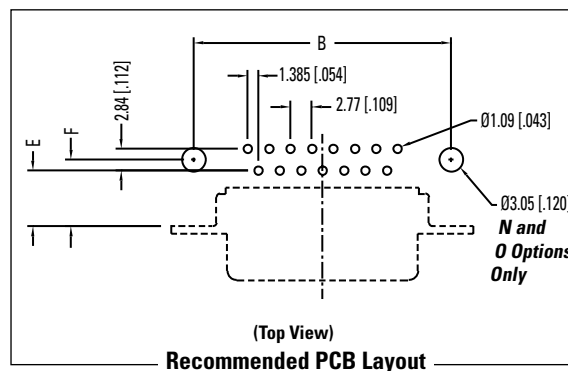
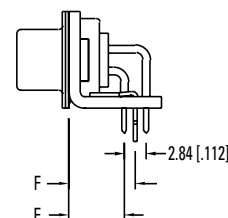
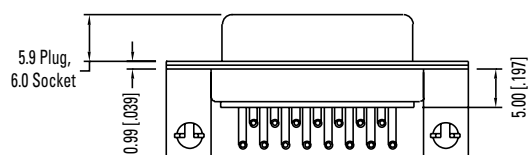
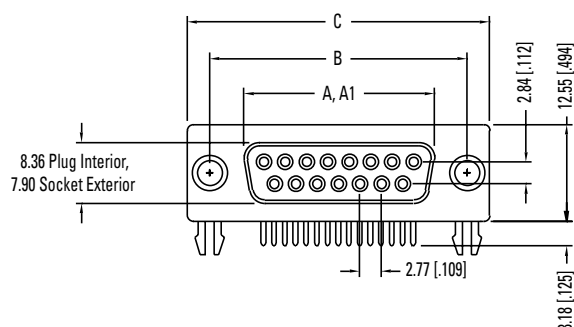
**A1 = Interior of Male Shell (P)**

## D-SUBMINIATURE CONNECTORS

### K85R1 / K85R2 Series

## K85R1/K85R2 Dimensions

With Mounting Brackets, and Grounding Board Locks





## K85 Series Vertical PCB Mount and Soldercup

### Ordering Information

|        |   |            |  |                      |   |                    |  |              |   |                  |  |                 |
|--------|---|------------|--|----------------------|---|--------------------|--|--------------|---|------------------|--|-----------------|
| K85    | - | B          |  | D                    | - | 25                 |  | S            | - | K                |  |                 |
| Series |   | Shell Size |  | Contact Construction |   | Number of Contacts |  | Contact Type |   | Mounting Options |  | Plating Options |

#### Series

K85-Kycon D-Subminiature Connector, Solder Cup or Vertical PCB Termination

#### Shell Size

E-9 Contacts  
A-15 Contacts  
B-25 Contacts  
C-37 Contacts

#### Contact Construction

| Designator | Contact Construction | Type of Termination      |
|------------|----------------------|--------------------------|
| A          | Precision Formed     | Solder Cup               |
| D          | Precision Formed     | Vertical Pin (PCB Mount) |

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options

K-with Riveted Threaded (4-40) Bushings  
KJ-with Riveted Threaded (4-40) Bushings and (4-40) Hex Jack Screws Installed  
BR-with (4-40) Riveted Threaded Tin Plated Board Lock  
BRJ-with (4-40) Riveted Threaded Tin Plated Board Lock and (4-40) Hex Jack Screws Installed  
R-with Round Riveted Jack Screws

Hex Jack Screws JS-1055 Recommended for BR Option.  
(See page 38 for Dimensions).

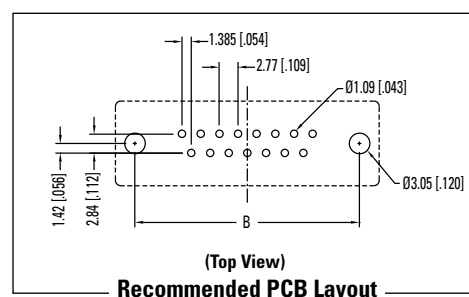
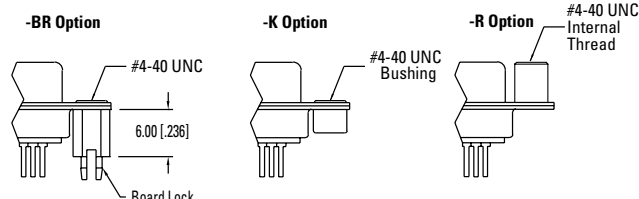
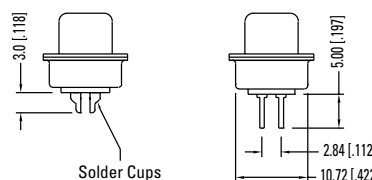
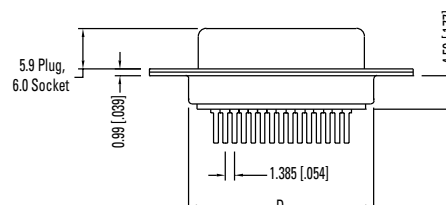
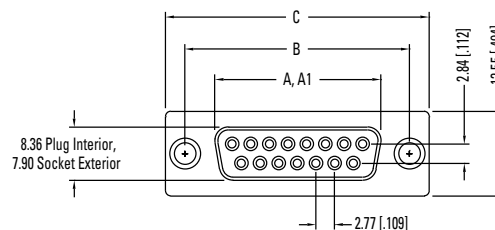
**Plating Options and Performance Specifications** (see page 4)

## D-SUBMINIATURE CONNECTORS

### K85 Series

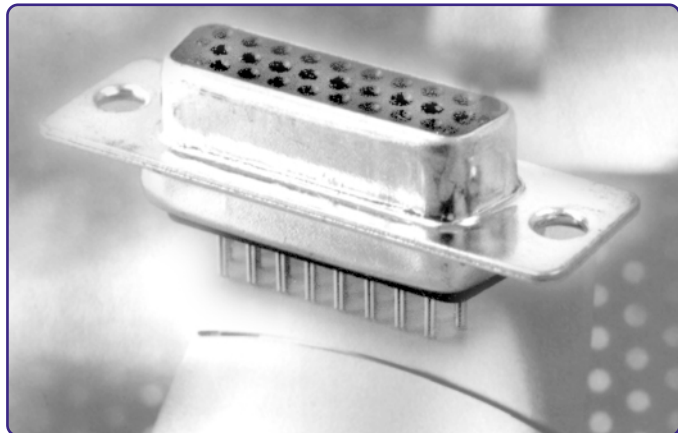
### K85 Series Dimensions

Dimensions in mm [In]



| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              | D              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .755<br>19.18  |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | 1.083<br>27.51 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.614<br>41.00 |
| 37 (C)                          | 2.159<br>54.84       | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | 2.272<br>57.71 |

**A = Exterior of Female Shell (S)**  
**A1 = Interior of Male Shell (P)**



## K86 Series High Density Vertical PCB Mount and Soldercup

### Ordering Information

|        |   |            |                      |   |                    |              |   |                  |   |                 |
|--------|---|------------|----------------------|---|--------------------|--------------|---|------------------|---|-----------------|
| K86    | - | E          | D                    | - | 15                 | S            | - | K                | - |                 |
| Series |   | Shell Size | Contact Construction |   | Number of Contacts | Contact Type |   | Mounting Options |   | Plating Options |

#### Series

K86-Kycon High Density D-Subminiature Connector, Solder Cup or Vertical PCB Termination

#### Shell Size

E-15 Contacts  
A-26 Contacts  
B-44 Contacts  
C-62 Contacts

#### Contact Construction

| Designator | Contact Construction | Type of Termination      |
|------------|----------------------|--------------------------|
| A          | Precision Formed     | Solder Cup               |
| D          | Precision Formed     | Vertical Pin (PCB Mount) |

#### Number of Contacts

15, 26, 44, 62

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options

K-with Riveted Threaded (4-40) Bushings  
KJ-with Riveted Threaded (4-40) Bushings and (4-40) Hex Jack Screws Installed  
BR-with (4-40) Riveted Threaded Tin Plated Board Lock  
BRJ-with (4-40) Riveted Threaded Tin Plated Board Lock and (4-40) Hex Jack Screws Installed  
R-with Round Riveted Jack Screws

Hex Jack Screws JS-1055 Recommended for BR Option.  
(See page 38 for Dimensions.)

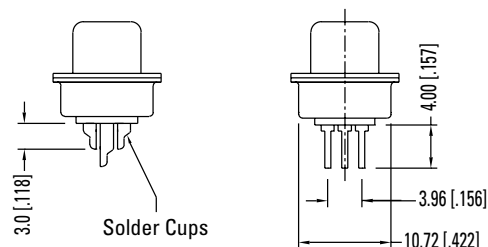
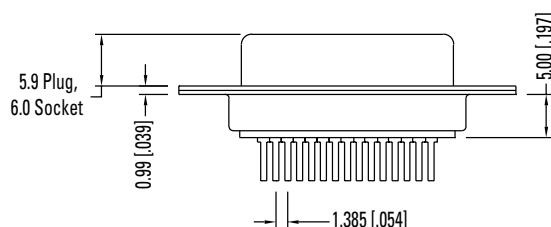
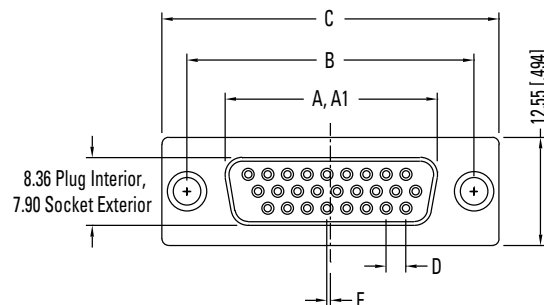
**Plating Options and Performance Specifications** (see page 4)

## D-SUBMINIATURE CONNECTORS

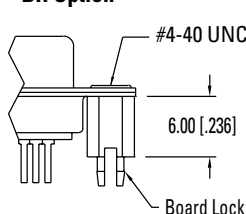
### K86 Series

### K86 Series Dimensions

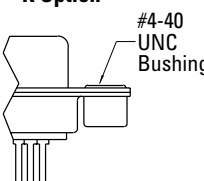
Dimensions in mm [In]



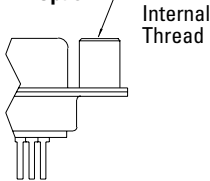
#### -BR Option



#### -K Option



#### -R Option



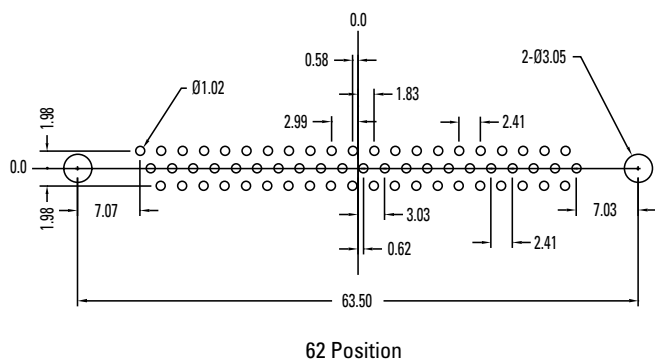
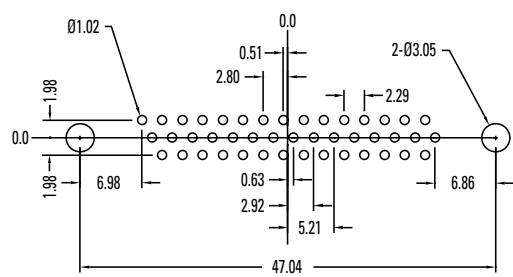
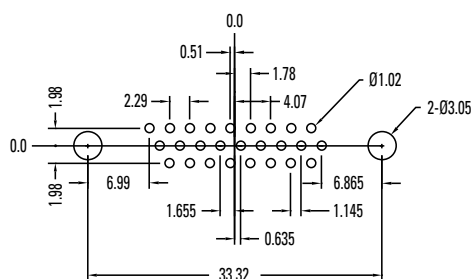
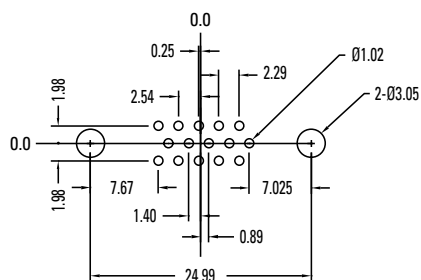
| Number of Contacts<br>(Shell Size) | Dimensions (Inch/mm) |                |                |                |              |              |
|------------------------------------|----------------------|----------------|----------------|----------------|--------------|--------------|
|                                    | A                    | A1             | B              | C              | D            | E            |
| 15 (E)                             | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .090<br>2.29 | .010<br>0.25 |
| 26 (A)                             | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | .090<br>2.29 | .020<br>0.51 |
| 44 (B)                             | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | .090<br>2.29 | .020<br>0.51 |
| 62 (C)                             | 2.159<br>54.84       | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | .094<br>2.41 | .023<br>0.58 |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)

## K86 Series Dimensions

Dimensions in mm

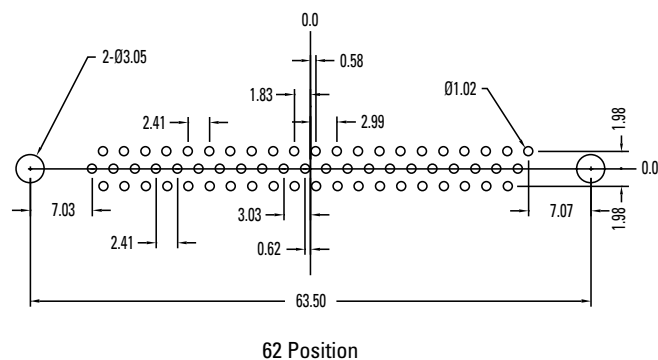
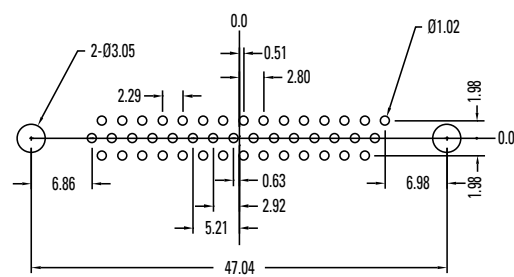
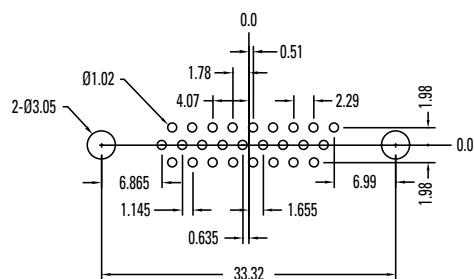
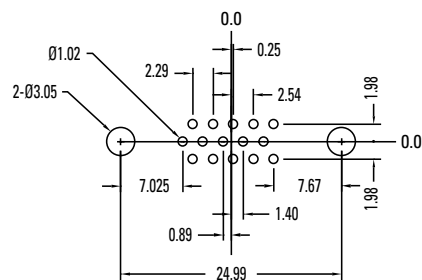


(Socket Top View)

Recommended PCB Layouts

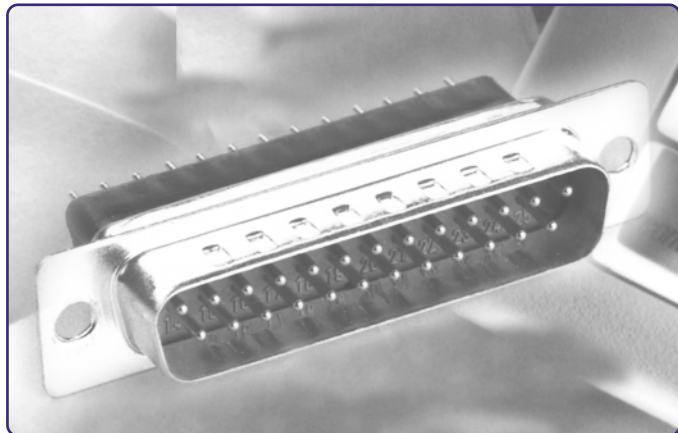
## D-SUBMINIATURE CONNECTORS

### K86 Series



(Plug Top View)

Recommended PCB Layouts



## K88 Series Vertical PCB Mount High Profile

### Ordering Information

|        |   |            |            |   |                    |              |   |                  |                 |
|--------|---|------------|------------|---|--------------------|--------------|---|------------------|-----------------|
| K88    | — | B          | F          | — | 25                 | S            | — | BRBJ             | 30              |
| Series |   | Shell Type | Pin Length |   | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |

#### Type

K88-Kycon D-Subminiature Connector Vertical PCB Termination, High Profile

#### Shell Size

E-9 Contacts  
A-15 Contacts  
B-25 Contacts  
C-37 Contacts

#### Pin Length

D-Precision Formed 3.80mm  
E-Precision Formed 5.20mm  
F-Precision Formed 7.20mm

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options

K-with (4-40) Bushings  
KJ-with (4-40) Bushings and (4-40) Hex Jack Screws  
BR-with (4-40) Tin Plated 11.00mm long Boardlocks  
BRJ-with (4-40) Tin Plated 11.00mm long Boardlocks and (4-40) Hex Jack Screws  
BRA-with (4-40) Tin Plated 12.70mm long Boardlocks  
BRAJ-with (4-40) Tin Plated 12.70mm long Boardlocks and (4-40) Hex Jack Screws  
BRB-with (4-40) Tin Plated 14.50mm long Boardlocks  
BRBJ-with (4-40) Tin Plated 14.50mm long Boardlocks and (4-40) Hex Jack Screws  
R-with Round Riveted Jack Screws

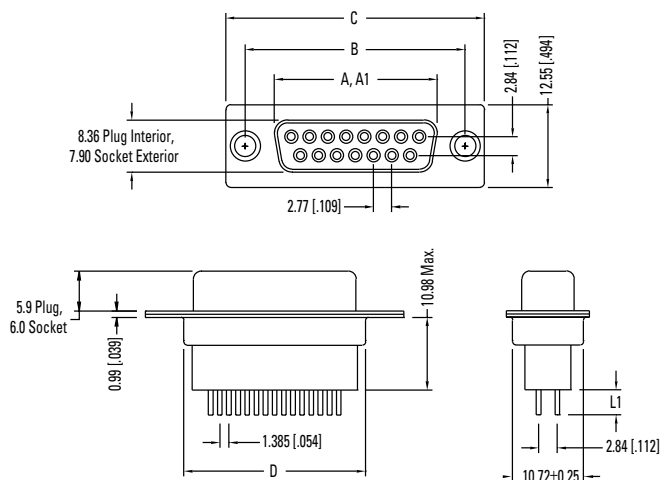
**Plating Options and Performance Specifications** (see page 4)

## D-SUBMINIATURE CONNECTORS

### K88 Series

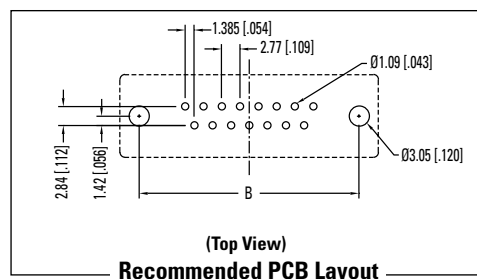
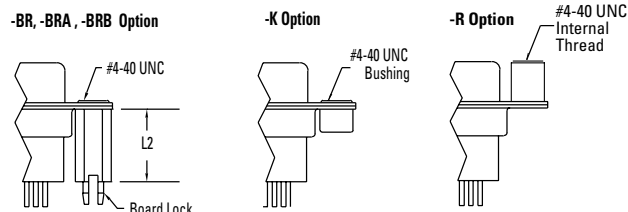
### K88 Series Dimensions

Dimensions in mm [In]



### Recommended Pin Lengths and Board Locks

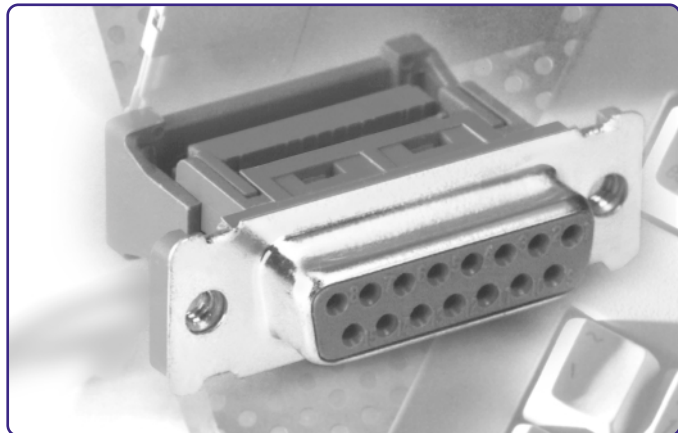
|     | Pin Length (L1) | Board Lock Type and Length (L2) |
|-----|-----------------|---------------------------------|
| (D) | 3.80mm          | (BR) 11.00mm                    |
| (E) | 5.20mm          | (BRA) 12.70mm                   |
| (F) | 7.20mm          | (BRB) 14.50mm                   |



| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              | D              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .755<br>19.18  |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | 1.083<br>27.51 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.614<br>41.00 |
| 37 (C)                          | 2.159<br>54.84       | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | 2.272<br>57.71 |

**A = Exterior of Female Shell (S)**

**A1 = Interior of Male Shell (P)**



## K99 Series IDC Termination D-Subminiature

### Features



- Applications Include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls and Local Area Networks
- Bright Tin Shells for Exceptional Conductivity, Grounding and EMI/RFI Shielding
- Indentations (Dimples) on Metal Plug Shells for Exceptional Grounding and Mating Retention
- Plastic Strain Relief Available Separately
- Flat Cable can be Connected to a Single Connector or Daisy Chained.
- Automatic Assembly Machine Compatible
- Design Meets the Requirements of MIL-C-24308, EIA RS-232 and RS-449.

### Performance Specifications

#### Materials and Finish

##### Shell

K99 Series: Steel Material, Tin Finish

SR Series: PBT Thermoplastic



##### Contact Material

Pin: Brass .040 (1.02) Diameter

Socket: Phosphor Bronze

##### Contact Finish

0.000005 (0.000127) Gold on Contact Wiping Area, All Other Areas are 0.0001 (0.00254) Tin Over 0.0001 (0.00254) Nickel

##### Riveted Insert

Brass Material, Nickel Finish

## D-SUBMINIATURE CONNECTORS

### K99 Series

#### Mechanical Characteristics

##### Contact Separation Force

4 Oz. Min

##### Contact Engagement Force

9 Oz. Min

#### Electrical Characteristics

##### Contact Current Rating

1 Amp

##### Contact Resistance

8 Milliohms Max

##### Dielectric Withstanding Voltage

1000 V AC Min

##### Insulation Resistance

1000 Megohms Min

##### Temperature Rating

-55°C to +125°C

##### Wire Accommodation

Flat Cable or Discrete Wire 26 or 28 AWG Stranded or Solid, and 30 AWG Solid Wires on .050 (1.27) Centers

### Ordering Information: Connector

| K99                                                                                                 | — | 25                 | S            | — | K                | — | BLK           |
|-----------------------------------------------------------------------------------------------------|---|--------------------|--------------|---|------------------|---|---------------|
| Series                                                                                              |   | Number of Contacts | Contact Type |   | Mounting Options |   | Color Options |
| <b>Series</b><br>K99 - KYCON IDC D-Subminiature Connector, Metal Construction                       |   |                    |              |   |                  |   |               |
| <b>Number of Contacts</b><br>9, 15, 25, 37                                                          |   |                    |              |   |                  |   |               |
| <b>Contact Type</b><br>P - Pin Contact (Plug)<br>S - Socket Contact (Receptacle)                    |   |                    |              |   |                  |   |               |
| <b>Mounting Options</b><br>K - With Riveted Threaded (4-40) Bushing<br>Blank - No Mounting Hardware |   |                    |              |   |                  |   |               |
| <b>Color Option</b><br>BLU: Blue Color<br>BLK: Black Color                                          |   |                    |              |   |                  |   |               |

### Ordering Information: Strain Relief

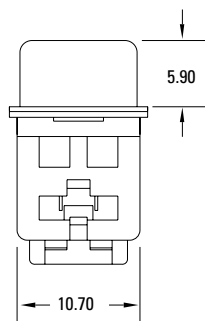
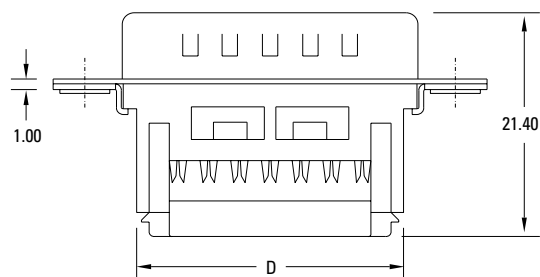
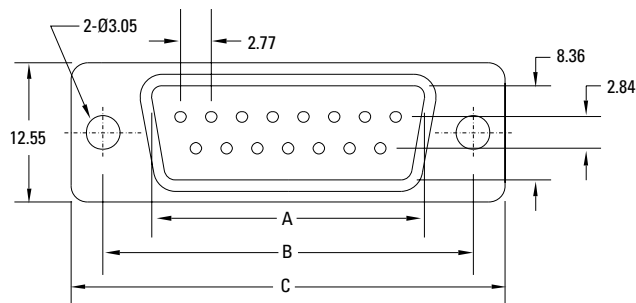
| SR                                                                  | 25                 | — | BLK           |
|---------------------------------------------------------------------|--------------------|---|---------------|
| Series                                                              | Number of Contacts |   | Color Options |
| <b>Series</b><br>SR-Plastic Strain Relief for K99 Series Connector* |                    |   |               |
| <b>Number of Contacts</b><br>9, 15, 25, 37                          |                    |   |               |
| <b>Color Option</b><br>BLU: Blue Color<br>BLK: Black Color          |                    |   |               |

\*Contact factory for specifications. 888-KYCON-22

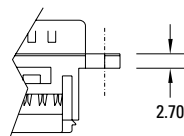
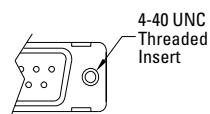
## K99 Series Dimensions

Dimensions in mm

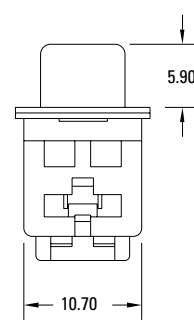
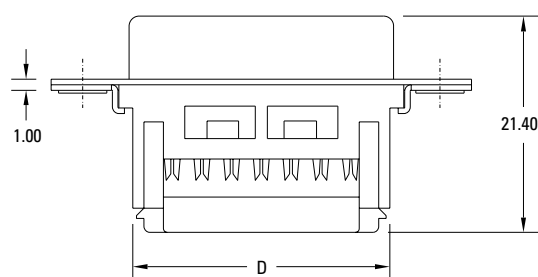
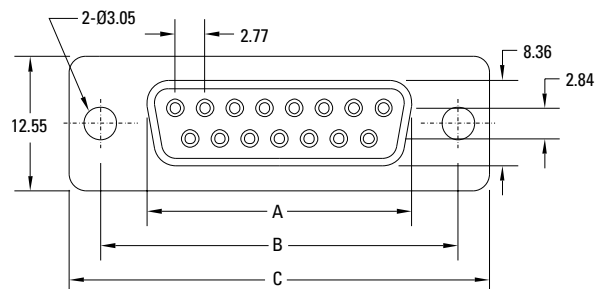
### K99 Male



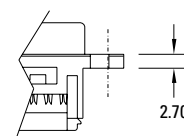
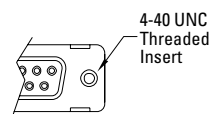
### "K" Option



### K99 Female



### "K" Option



Dimensions (Inch/mm)

| Shell Size | A            | B            | C            | D            |
|------------|--------------|--------------|--------------|--------------|
| <b>9</b>   | <b>.666</b>  | <b>.984</b>  | <b>1.213</b> | <b>.732</b>  |
| (E)        | 16.92        | 24.99        | 30.81        | 18.60        |
| <b>15</b>  | <b>.994</b>  | <b>1.312</b> | <b>1.539</b> | <b>1.047</b> |
| (A)        | 24.25        | 33.32        | 39.10        | 26.60        |
| <b>25</b>  | <b>1.534</b> | <b>1.852</b> | <b>2.090</b> | <b>1.610</b> |
| (B)        | 38.96        | 47.04        | 53.09        | 40.90        |
| <b>37</b>  | <b>2.183</b> | <b>2.500</b> | <b>2.732</b> | <b>2.248</b> |
| (C)        | 55.45        | 63.50        | 69.40        | 57.10        |

Dimensions (Inch/mm)

| Shell Size | A            | B            | C            | D           |
|------------|--------------|--------------|--------------|-------------|
| <b>9</b>   | <b>.643</b>  | <b>.984</b>  | <b>1.213</b> | <b>.732</b> |
| (E)        | 16.33        | 24.99        | 30.81        | 18.60       |
| <b>15</b>  | <b>.971</b>  | <b>1.312</b> | <b>1.539</b> | <b>1.05</b> |
| (A)        | 24.66        | 33.32        | 39.10        | 26.60       |
| <b>25</b>  | <b>1.511</b> | <b>1.852</b> | <b>2.090</b> | <b>1.67</b> |
| (B)        | 38.38        | 47.04        | 53.09        | 40.90       |
| <b>37</b>  | <b>2.159</b> | <b>2.500</b> | <b>2.732</b> | <b>2.24</b> |
| (C)        | 54.84        | 63.50        | 69.40        | 57.10       |

**KYCON continues its leadership in D-Subs by offering a family of dual and multiport connectors.**

### Features:

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls, Local Area Networks, and Multimedia
- Variety of standard parts for greater versatility
- PC99 Colors Available
- Multiport connectors available with up to 3 D-Subs
- D-Subs designed for use on ATX motherboards
- Elevated D-sub for individual customization
- Dual port available with ferrite (see page 31)
- Different mounting options available
- Custom and semi-custom options available for specific customer applications
- Multiple Center to Center distances available
- UL Recognized File No. E140125
- CSA/NRTL Certified File No. LR78160



KYCON Tech Support: **1-888-KYCON-22**  
or E-mail: [sales@kycon.com](mailto:sales@kycon.com)

## MULTIPORT D-SUBMINIATURE

### Directory

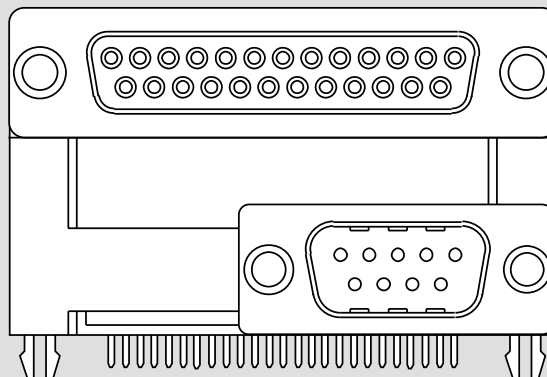
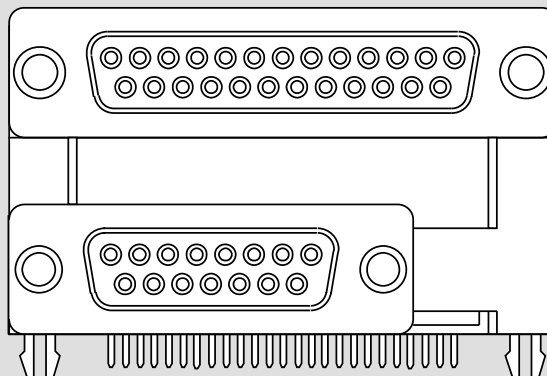
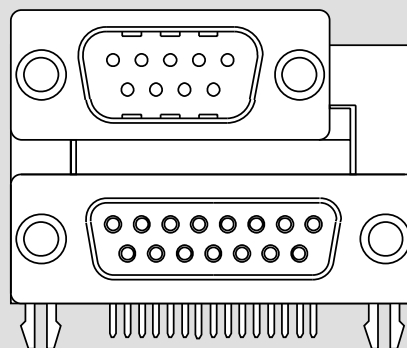
#### Standard Dual Port Configurations

|            |           |
|------------|-----------|
| <b>K42</b> | <b>22</b> |
|------------|-----------|



#### Standard Multiport Configurations

|                                   |           |
|-----------------------------------|-----------|
| <b>K42-DB25 over DB9</b>          | <b>23</b> |
| <b>K42-DB25 over HD15</b>         | <b>24</b> |
| <b>K42-DB9 over HD15</b>          | <b>24</b> |
| <b>K42-HD15 over HD15</b>         | <b>25</b> |
| <b>K42-DB25L over DB37</b>        | <b>25</b> |
| <b>K42-DB25 over two DB9</b>      | <b>26</b> |
| <b>K42-DB25 over HD15 and DB9</b> | <b>26</b> |





## K42 Series Dual-Port D-Sub

### Ordering Information

|        |   |            |                    |                      |   |                         |   |                           |                  |                 |  |
|--------|---|------------|--------------------|----------------------|---|-------------------------|---|---------------------------|------------------|-----------------|--|
| K42    | - | B          | 25                 | P                    | / | S                       | - | A                         | 4N               |                 |  |
| Series |   | Shell Size | Number of Contacts | Top Connector Gender |   | Bottom Connector Gender |   | Center to Center Distance | Mounting Options | Plating Options |  |

#### Series

K42 - Kycon Dual-Port D-Subminiature Connector

#### Shell Size

E - 9 Contacts

A - 15 Contacts

B - 25 Contacts

C - 37 Contacts

#### Number of Contacts Per Port

9, 15, 25, 37

#### Top Connector Gender

P - Pin Contact (Plug)

S - Socket Contact (Receptacle)

#### Bottom Connector Gender

P - Pin Contact (Plug)

S - Socket Contact (Receptacle)

#### Center to Center Distance

A - .750"

B - .900"

C - .625"

#### Mounting Options (see page 37)

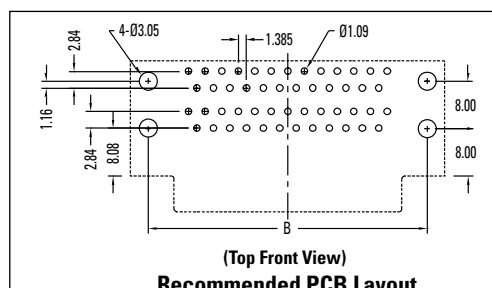
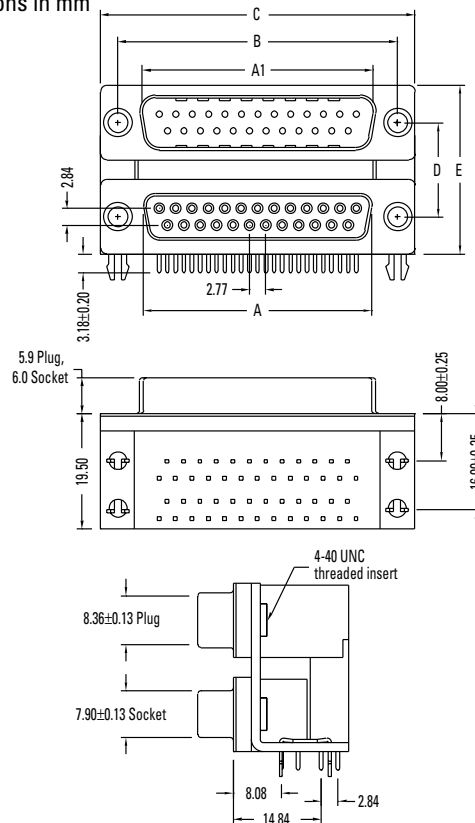
#### Plating Options and Performance Specifications (see page 4)

## MULTI-PORT D-SUBMINIATURE

### K42 Series

### K42 Series Dimensions

Dimensions in mm

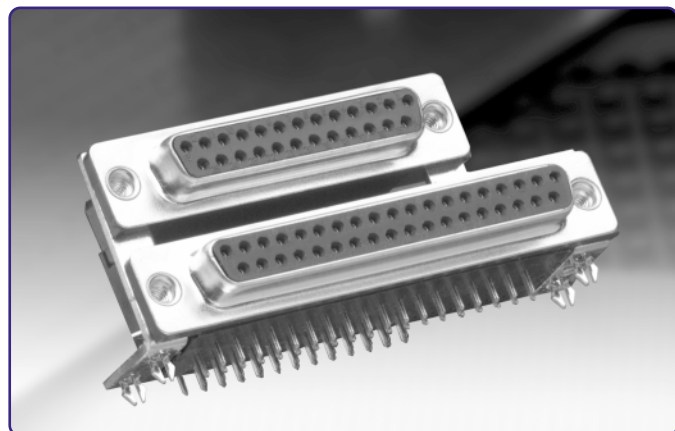


| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 |
| 37 (C)                          | 2.159<br>54.84       | 2.181<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 |

| Center to Center Spacing | D             | E              |
|--------------------------|---------------|----------------|
| A                        | .750<br>19.05 | 1.244<br>31.60 |
| B                        | .900<br>22.86 | 1.394<br>35.41 |
| C                        | .625<br>15.88 | 1.119<br>28.42 |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)



## K42 Series Combination Multiport D-Subminiature

### Ordering Information

|                    |                                                                               |
|--------------------|-------------------------------------------------------------------------------|
| K42-B25S/E9P-A4N   | 25 Pin Female over 9 Pin Male, .750" Center to Center Spacing                 |
| K42-B25S/E9P-B4N   | 25 Pin Female over 9 Pin Male, .900" Center to Center Spacing                 |
| K42-B25S/E9P-C4N   | 25 Pin Female over 9 Pin Male, .625" Center to Center Spacing                 |
| K42-B25S/E15S-A4N  | 25 Pin Female over 15 Pin High Density Female, .750" Center to Center Spacing |
| K42-B25S/E15S-B4N  | 25 Pin Female over 15 Pin High Density Female, .900" Center to Center Spacing |
| K42-B25S/E15S-C4N  | 25 Pin Female over 15 Pin High Density Female, .625" Center to Center Spacing |
| K42-E9P/E15S-A4N   | 9 Pin Male over 15 Pin Female High Density                                    |
| K42-25/9-9-A4N     | 25 Pin Female over Two 9 Pin Males                                            |
| K42-25/9-15-A4N    | 25 Pin Female over 9 Pin Male and 15 Pin High Density Female                  |
| K42-25/15-9-A4N    | 25 Pin Female over 15 Pin High Density Female and 9 Pin Male                  |
| K42-B25SL/C37S-C4N | Offset 25 Pin Female over 37 Pin Female                                       |
| K42-E15S/S-A4N     | 15 Pin High Density Female over 15 Pin High Density Female                    |

### Plating Options

| Designator | Plating Description                                                                   |
|------------|---------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails.              |
| 15         | 15μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |
| 30         | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |

### Performance Specifications (see page 4)

## MULTIPORT D-SUBMINIATURE

### K42 Series

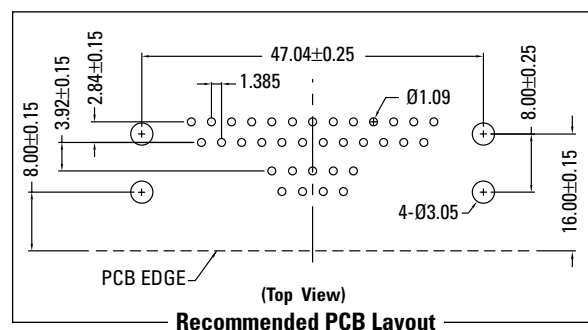
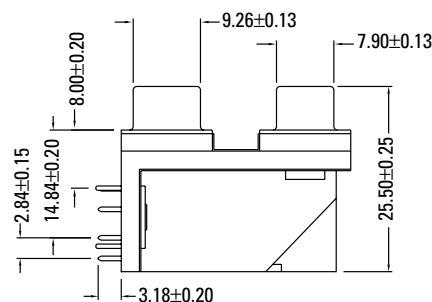
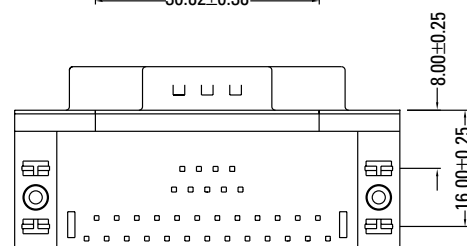
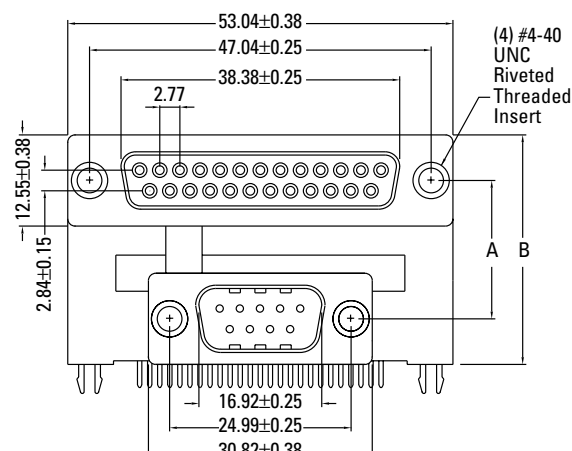
### K42 Series Dimensions

Dimensions in mm

K42-B25S/E9P-A4N

K42-B25S/E9P-B4N

K42-B25S/E9P-C4N



| Dimensions (Inch/mm)     |            |              |
|--------------------------|------------|--------------|
| Center to Center Spacing | A          | B            |
| A                        | .750/19.05 | 1.244/31.60  |
| B                        | .900/22.86 | 1.394/35.41  |
| C                        | .625/15.88 | 1.119/ 28.42 |

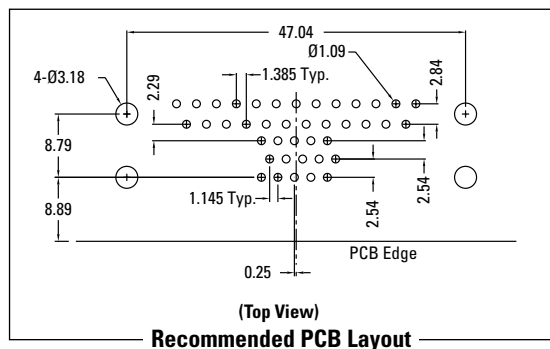
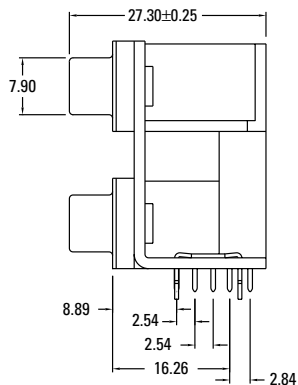
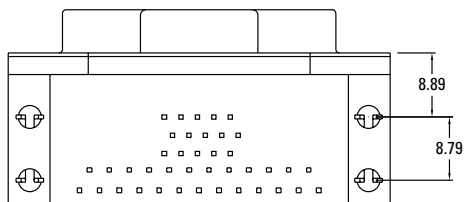
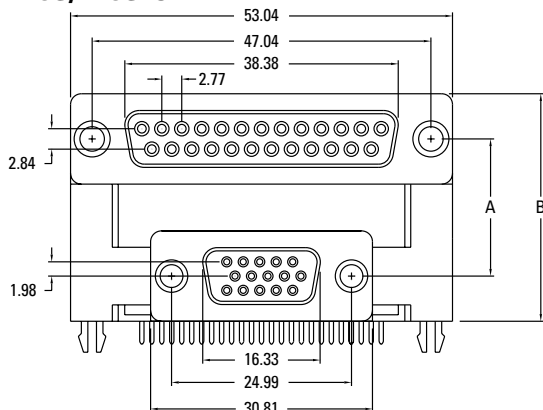
## K42 Series Dimensions

Dimensions in mm

**K42-B25S/E15S-A4N**

**K42-B25S/E15S-B4N**

**K42-B25S/E15S-C4N**



**Recommended PCB Layout**

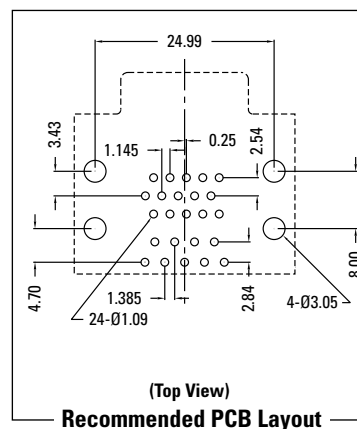
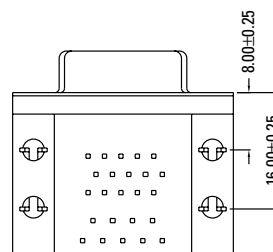
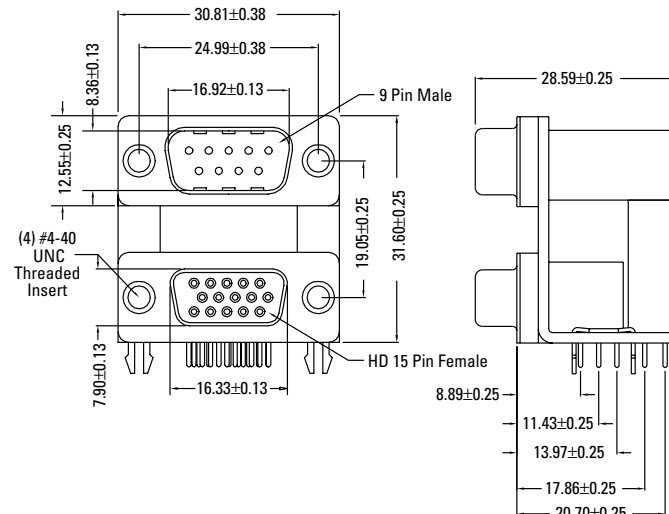
| Dimensions (Inch/mm)     |              |               |
|--------------------------|--------------|---------------|
| Center to Center Spacing | A            | B             |
| A                        | .750 / 19.05 | 1.244 / 31.60 |
| B                        | .900 / 22.86 | 1.394 / 35.41 |
| C                        | .625 / 15.88 | 1.119 / 28.42 |

## MULTIPORT D-SUBMINIATURE

### K42 Series

## K42-E9P/E15S-A4N

Dimensions in mm

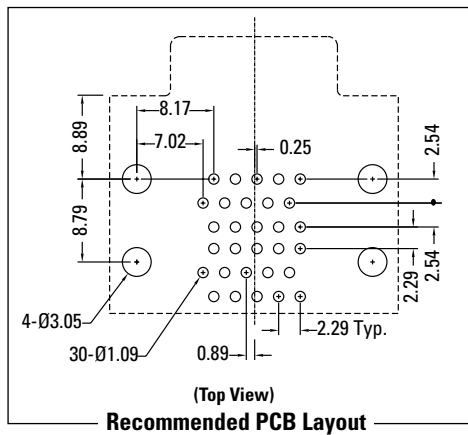
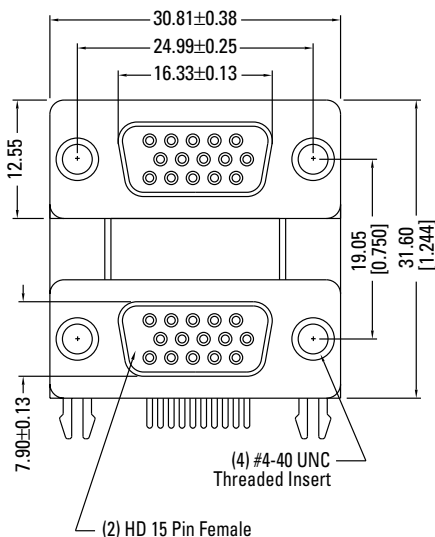


**(Top View)  
Recommended PCB Layout**

## K42 Series Dimensions

Dimensions in mm

### K42-E15S/S-A4N

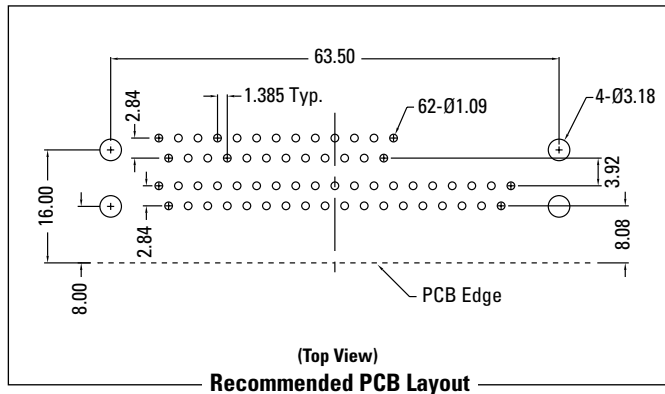
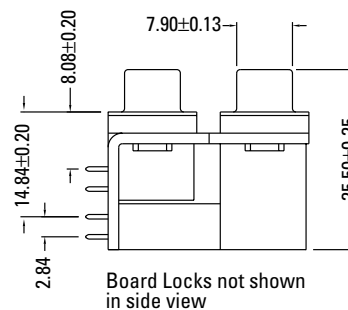
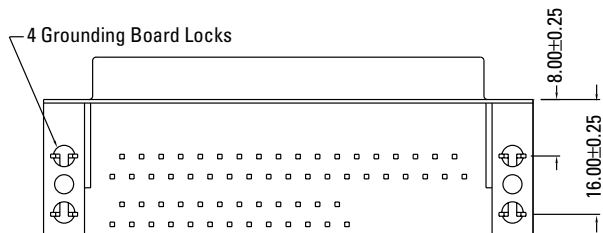
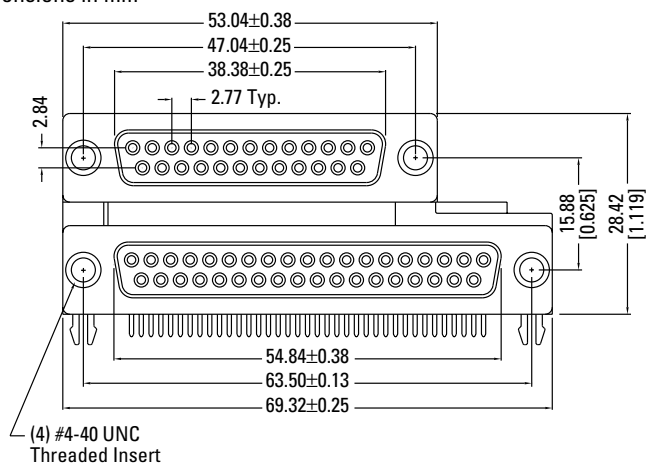


## MULTIPORT D-SUBMINIATURE

### K42 Series

### K42-B25SL/C37S-C4N

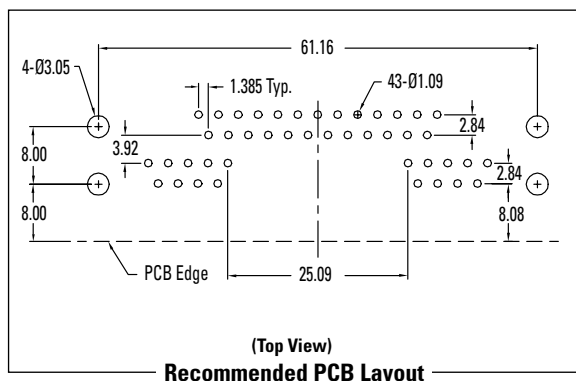
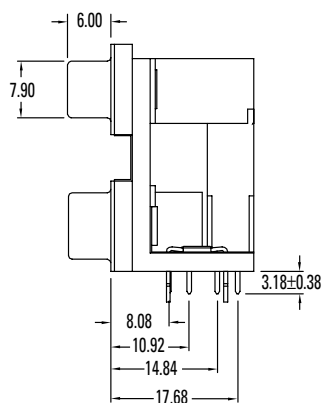
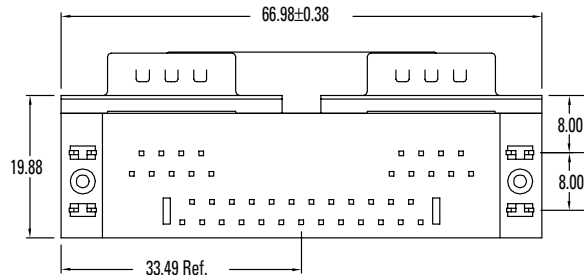
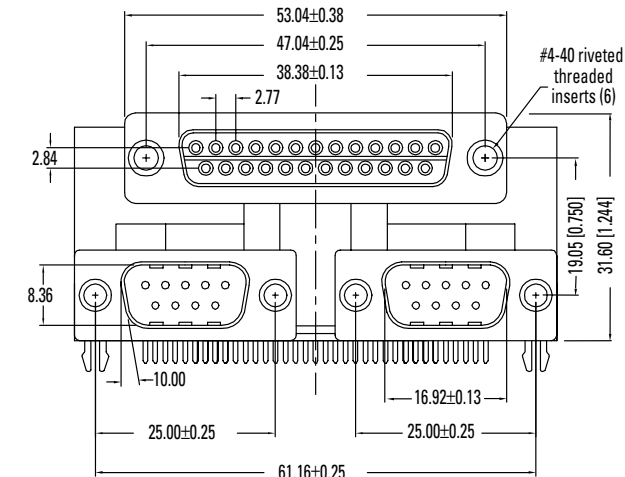
Dimensions in mm



## K42 Series Dimensions

### K42-25/9-9-A4N

Dimensions in mm



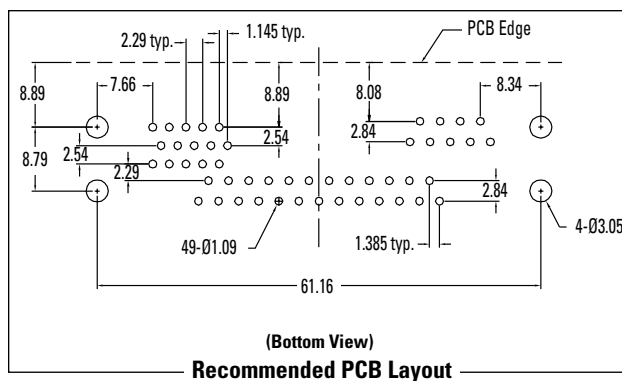
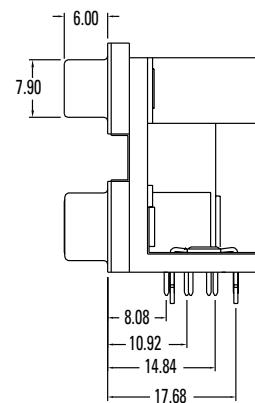
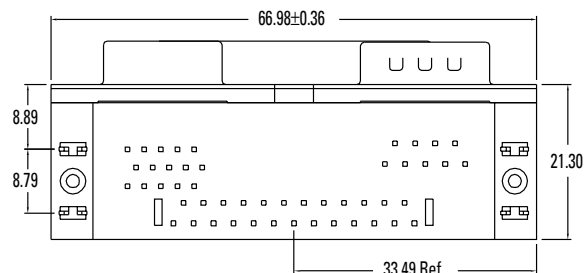
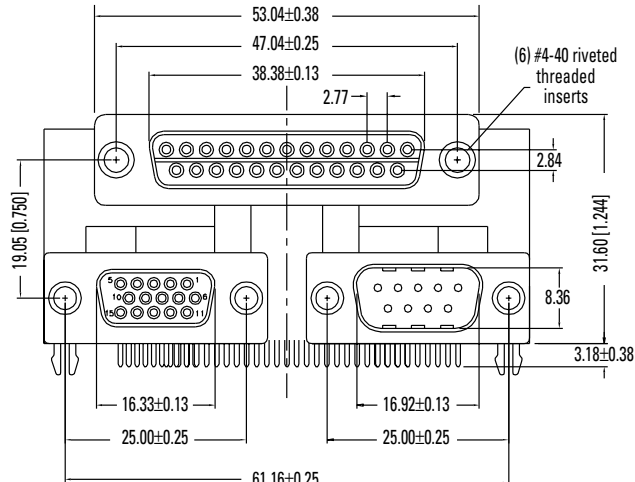
(Top View)  
Recommended PCB Layout

## MULTIPORT D-SUBMINIATURE

### K42 Series

### K42-25/15-9-A4N

Dimensions in mm



(Bottom View)  
Recommended PCB Layout

**KYCON continues its leadership in Ferrite D-Subs by offering a complete line of styles, sizes, and pin configurations.**

### Features:

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls, and Local Area Networks
- High performance ferrite filter with superior high frequency attenuation characteristics
- Minimal effect on fundamental waveforms
- EMI/RFI noise suppression in data communication lines
- Cost effective way to meet FCC and VDE Class B requirements
- Does not require any more board space than a standard D-Sub
- No need to redesign board layout to accommodate separate filter placement
- UL Recognized File No. E140125

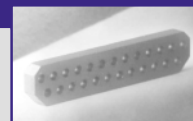


## FERRITE D-SUBMINIATURE CONNECTORS

### Directory

#### Right Angle

|                                             |           |
|---------------------------------------------|-----------|
| <b>KF22 - 0.318" footprint</b>              | <b>28</b> |
| <b>KF44 - 0.590" footprint</b>              | <b>29</b> |
| <b>KF66 - High Density 0.350" footprint</b> | <b>30</b> |
| <b>KF42 - Dual Port</b>                     | <b>31</b> |



#### Vertical

|                            |           |
|----------------------------|-----------|
| <b>KF85 - Low Profile</b>  | <b>32</b> |
| <b>KF86 - High Density</b> | <b>33</b> |
| <b>KF88 - High Profile</b> | <b>34</b> |



### Technical Information:

Ferrite filters provide an easy and efficient way of reducing both radiated and conducted interference. KYCON uses a medium permeability nickel zinc ferrite material that is most effective at attenuating frequencies above 30MHz.

$$Attenuation = 20 \log_{10} \frac{[Z_s + Z_F + Z_L]}{[Z_s + Z_L]} \text{ dB}$$

Where  $Z_s$  = Source Impedance

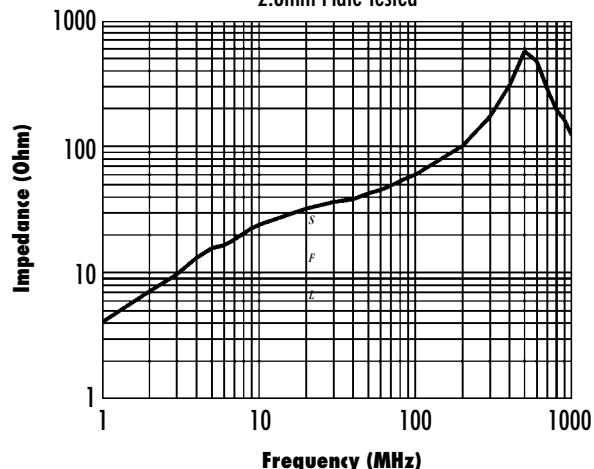
$Z_F$  = Ferrite Impedance

$Z_L$  = Load Impedance

With the above impedance values calculated at the interference frequency.

#### Typical Impedance of KYCON Ferrite D-Sub

2.8mm Plate Tested



The above chart is typical performance data for a 2.8mm thick ferrite plate at room temperature. Impedance will be reduced by increased temperature (down approx. 15% at 100°C at 25MHz) and by increased DC bias (down approx. 15% at 1 amp at 25MHz). Also, impedance varies with ferrite thickness. Please contact our technical support for data specific to your application.



## KF22 Series Right Angle PCB Mount .318" Footprint with Ferrite

### Ordering Information

| KF22                                                                                                              | - | B          | 25                 | S            | - | N                |                 |
|-------------------------------------------------------------------------------------------------------------------|---|------------|--------------------|--------------|---|------------------|-----------------|
| Series                                                                                                            |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |
| <b>Series</b><br>KF22 - Kycon D-Subminiature Connector, Right Angle PCB Termination, .318 Footprint, with Ferrite |   |            |                    |              |   |                  |                 |
| <b>Shell Size</b><br>E - 9 Contacts<br>A - 15 Contacts<br>B - 25 Contacts<br>C - 37 Contacts                      |   |            |                    |              |   |                  |                 |
| <b>Number of Contacts</b><br>9, 15, 25, 37                                                                        |   |            |                    |              |   |                  |                 |
| <b>Contact Type</b><br>P - Pin Contact (Plug)<br>S - Socket Contact (Receptacle)                                  |   |            |                    |              |   |                  |                 |
| <b>Mounting Options</b> (see page 35)                                                                             |   |            |                    |              |   |                  |                 |
| <b>Plating Options and Performance Specifications</b> (see page 4)                                                |   |            |                    |              |   |                  |                 |

### Ferrite Specifications

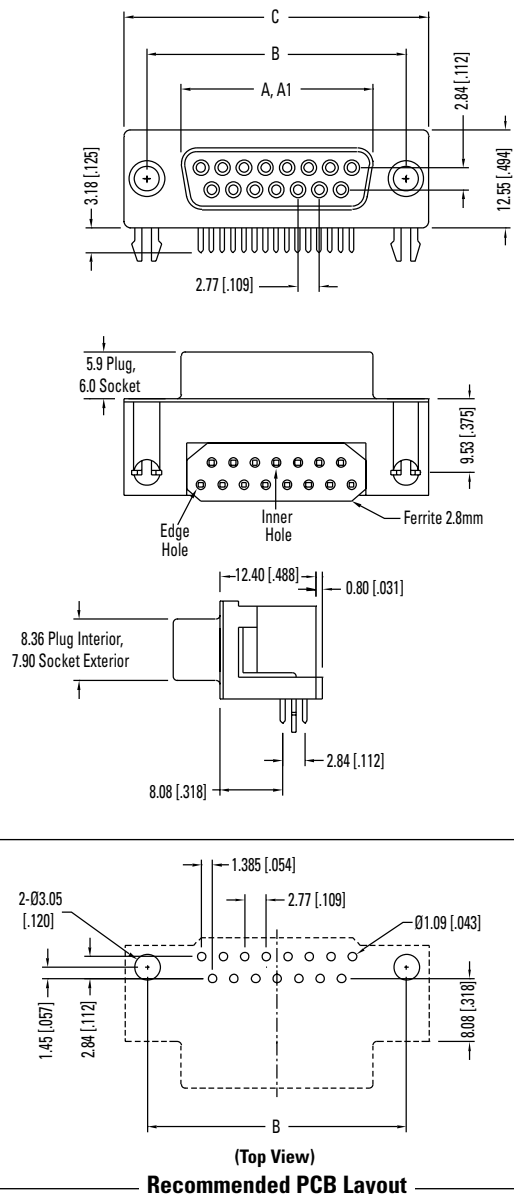
| Test Frequency | Edge Hole  | Inner Hole |
|----------------|------------|------------|
| 30 MHz         | 17-27 Ohms | 22-30 Ohms |
| 50 MHz         | 22-30 Ohms | 29-37 Ohms |
| 100 MHz        | 29-34 Ohms | 35-40 Ohms |

## FERRITE D-SUBMINIATURE

### KF22 Series

### KF22 Series Dimensions

Pictured with Board Lock Option, Dimensions in mm [In]



| Shell Size       | A                     | AI                    | B                     | C                     |
|------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| In mm            | ±.010<br>±0.25        | ±.010<br>±0.25        | ±.005<br>±0.13        | ±.015<br>±0.38        |
| <b>9</b><br>(E)  | <b>.643</b><br>16.33  | <b>.666</b><br>16.92  | <b>.984</b><br>24.99  | <b>1.213</b><br>30.81 |
| <b>15</b><br>(A) | <b>.971</b><br>24.66  | <b>.994</b><br>25.25  | <b>1.312</b><br>33.32 | <b>1.541</b><br>39.14 |
| <b>25</b><br>(B) | <b>1.511</b><br>38.38 | <b>1.534</b><br>38.96 | <b>1.852</b><br>47.04 | <b>2.088</b><br>53.04 |
| <b>37</b><br>(C) | <b>2.159</b><br>54.84 | <b>2.182</b><br>55.42 | <b>2.500</b><br>63.50 | <b>2.729</b><br>69.32 |

**A = Exterior of Female Shell (S)**  
**A1 = Interior of Male Shell (P)**



## KF44 Series Right Angle PCB Mount .590" Footprint with Ferrite

### Ordering Information

| KF44                                                                                                              | - | B          | 25                 | S            | - | P                |                 |
|-------------------------------------------------------------------------------------------------------------------|---|------------|--------------------|--------------|---|------------------|-----------------|
| Series                                                                                                            |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |
| <b>Series</b><br>KF44 - Kycon D-Subminiature Connector, Right Angle PCB Termination, .590 Footprint, with Ferrite |   |            |                    |              |   |                  |                 |
| <b>Shell Size</b><br>E-9 Contacts<br>A-15 Contacts<br>B-25 Contacts<br>C-37 Contacts                              |   |            |                    |              |   |                  |                 |
| <b>Number of Contacts</b><br>9, 15, 25, 37                                                                        |   |            |                    |              |   |                  |                 |
| <b>Contact Type</b><br>P-Pin Contact (Plug)<br>S-Socket Contact (Receptacle)                                      |   |            |                    |              |   |                  |                 |
| <b>Mounting Options</b> (see page 36)                                                                             |   |            |                    |              |   |                  |                 |
| <b>Plating Options and Performance Specifications</b> (see page 4)                                                |   |            |                    |              |   |                  |                 |

### Ferrite Specifications

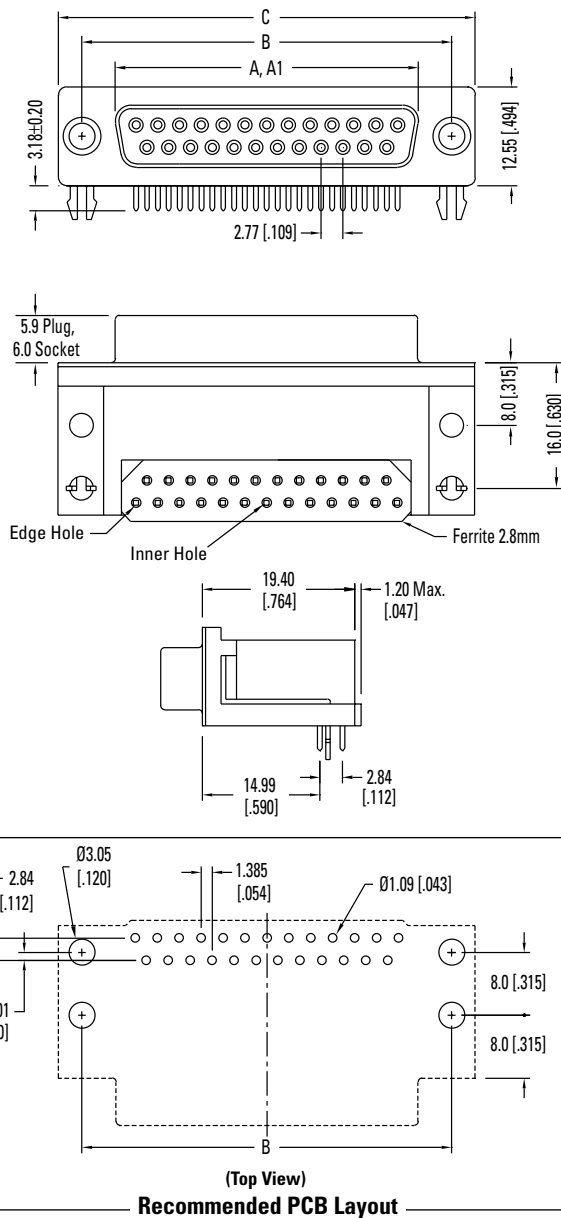
| Test Frequency | Edge Hole  | Inner Hole |
|----------------|------------|------------|
| 30 Mhz         | 17-27 Ohms | 22-30 Ohms |
| 50 Mhz         | 22-30 Ohms | 29-37 Ohms |
| 100 Mhz        | 29-34 Ohms | 35-40 Ohms |

## FERRITE D-SUBMINIATURE

### KF44 Series

### KF44 Series Dimensions

Pictured with Board Lock Option, Dimensions in mm [In]



| Shell Size | In<br>mm | A              | AI             | B              | C              |
|------------|----------|----------------|----------------|----------------|----------------|
|            |          | ±.010<br>±0.25 | ±.010<br>±0.25 | ±.005<br>±0.13 | ±.015<br>±0.38 |
| 9<br>(E)   |          | .643<br>16.33  | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 |
| 15<br>(A)  |          | .971<br>24.66  | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 |
| 25<br>(B)  |          | 1.511<br>38.38 | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 |
| 37<br>(C)  |          | 2.159<br>54.84 | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 |

A = Exterior of Female Shell (S)

AI = Interior of Male Shell (P)



## KF66 Series High Density Right Angle PCB Mount with Ferrite

### Ordering Information

| KF66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | - | E          | 15                 | S            | - | N                |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------|--------------------|--------------|---|------------------|-----------------|
| Series                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   | Shell Size | Number of Contacts | Contact Type |   | Mounting Options | Plating Options |
| <b>Series</b><br>KF66 - Kycon High Density D-Subminiature Connector, Right Angle PCB Termination, .350 Footprint, with Ferrite<br>KF66 - VESA - Contact factory for Specifications<br><b>Shell Size, Number of Contacts</b><br>E-15 Contacts<br>A-26 Contacts<br>B-44 Contacts<br>C-62 Contacts<br><b>Contact Type</b><br>P-Pin Contact (Plug)<br>S-Socket Contact (Receptacle)<br><b>Mounting Options</b> (see page 35)<br><b>Plating Options and Performance Specifications</b> (see page 4) |   |            |                    |              |   |                  |                 |

### Ferrite Specifications

| Test Frequency | Outer Row  | Inner Row  |
|----------------|------------|------------|
| 30 Mhz         | 20-23 Ohms | 31-38 Ohms |
| 50 Mhz         | 24-27 Ohms | 37-43 Ohms |
| 100 Mhz        | 29-31 Ohms | 41-48 Ohms |

Please see page 9 for recommended PCB layouts.

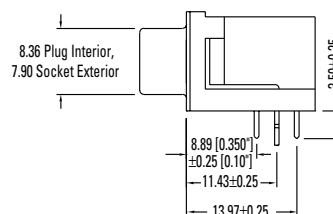
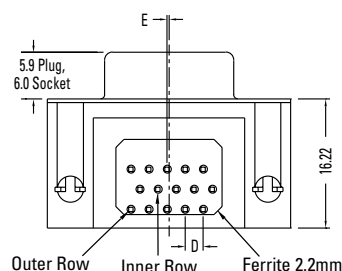
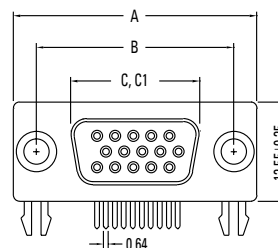
Note: Please check D and E dimensions on 62 contacts.

## FERRITE D-SUBMINIATURE

### KF66 Series

### KF66 Series Dimensions

Pictured with Board Lock Option, Dimensions in mm [In]



| Shell Size       | A                     | B                     | C                     | C1                    | D                   | E                   |
|------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|
| In mm            | ± .015<br>± 0.38      | ± .005<br>± 0.13      | ± .010<br>± 0.25      | ± .010<br>± 0.25      | ± .005<br>± 0.13    | ± .005<br>± 0.13    |
| <b>15</b><br>(E) | <b>1.213</b><br>30.81 | <b>.984</b><br>24.99  | <b>.643</b><br>16.33  | <b>.666</b><br>16.92  | <b>.090</b><br>2.29 | <b>.010</b><br>0.25 |
| <b>26</b><br>(A) | <b>1.541</b><br>39.14 | <b>1.312</b><br>33.32 | <b>.971</b><br>24.66  | <b>.994</b><br>25.25  | <b>.090</b><br>2.29 | <b>.020</b><br>0.51 |
| <b>44</b><br>(B) | <b>2.088</b><br>53.04 | <b>1.852</b><br>47.04 | <b>1.511</b><br>38.38 | <b>1.534</b><br>38.96 | <b>.090</b><br>2.29 | <b>.020</b><br>0.51 |
| <b>62</b><br>(C) | <b>2.729</b><br>69.32 | <b>2.500</b><br>63.50 | <b>2.159</b><br>54.84 | <b>2.182</b><br>55.42 | <b>.095</b><br>2.41 | <b>.023</b><br>0.58 |

C = Exterior of Female Shell (S)

C1 = Interior of Male Shell (P)



## KF42 Series Dual Port D-Sub with Ferrite

### Ordering Information

| Series | Shell Size | Number of Contacts | Top Connector Gender | Bottom Connector Gender | Center to Center Distance | Mounting Options | Plating Options |
|--------|------------|--------------------|----------------------|-------------------------|---------------------------|------------------|-----------------|
| KF42   | B          | 25                 | S                    | S                       | A                         | 4N               |                 |

#### Series

KF42-Kycon Dual-Port D-Subminiature Connector with Ferrite

#### Shell Size

E-9 Contacts  
A-15 Contacts  
B-25 Contacts  
E-15 Contacts (High Density)

#### Number of Contacts Per Port

9, 15, 25

#### Top Connector Gender

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Bottom Connector Gender

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Center to Center Distance (D Dimension)

A-.750"  
B-.900"  
C-.625"

#### Mounting Options (see page 37)

#### Plating Options and Performance Specifications (see page 4)

### Ferrite Specifications

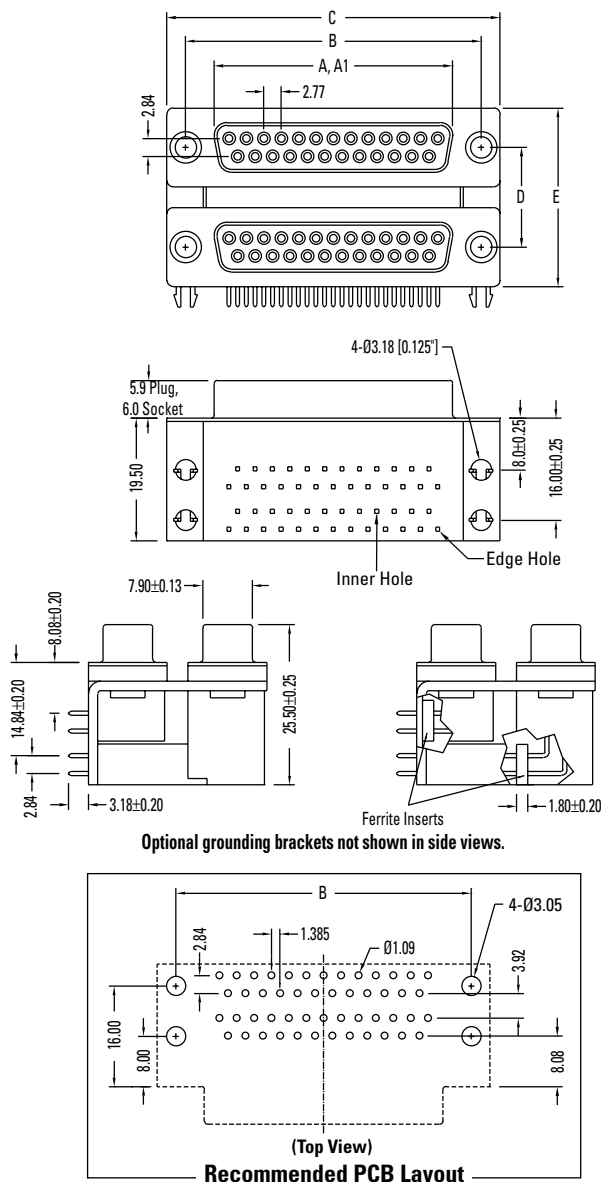
| Test Frequency | Edge Hole  | Inner Hole |
|----------------|------------|------------|
| 30 Mhz         | 17-27 Ohms | 22-30 Ohms |
| 50 Mhz         | 22-30 Ohms | 29-37 Ohms |
| 100 Mhz        | 29-34 Ohms | 35-40 Ohms |

## FERRITE D-SUBMINIATURE

### KF42 Series

### KF42 Series Dimensions

Pictured with Board Lock Option, Dimensions in mm [In]



| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 |

| Center to Center Spacing | D             | E              |
|--------------------------|---------------|----------------|
| A                        | .750<br>19.05 | 1.244<br>31.60 |
| B                        | .900<br>22.86 | 1.394<br>35.41 |
| C                        | .625<br>15.88 | 1.119<br>28.42 |

A = Exterior of Female Shell (S)

A1 = Interior of Male Shell (P)



## KF85 Series Vertical PCB Mount Low Profile with Ferrite High Frequency EMI/RFI Suppression

### Ordering Information

|        |   |            |                      |   |                    |              |   |                  |         |
|--------|---|------------|----------------------|---|--------------------|--------------|---|------------------|---------|
| KF85   | - | B          | D                    | - | 25                 | S            | - | K                |         |
| Series |   | Shell Size | Contact Construction |   | Number of Contacts | Contact Type |   | Mounting Options | Plating |

#### Series

KF85-Kycon D-Subminiature Connector, Vertical PCB Termination with Ferrite

#### Shell Size

E-9 Contacts  
A-15 Contacts  
B-25 Contacts  
C-37 Contacts

#### Contact Construction

D-Precision Formed

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options

K-with Riveted Threaded (4-40) Bushings  
KJ-with Riveted Threaded (4-40) Bushings and (4-40) Hex Jack Screws Installed  
BR-with (4-40) Riveted Threaded Tin Plated Board Lock  
BRJ-with (4-40) Riveted Threaded Tin Plated Board Lock and (4-40) Hex Jack Screws Installed  
R-with Round Riveted Jack Screws

Hex Jack Screws JS-1055 Recommended for BR Option.  
See page 38 for Dimensions.

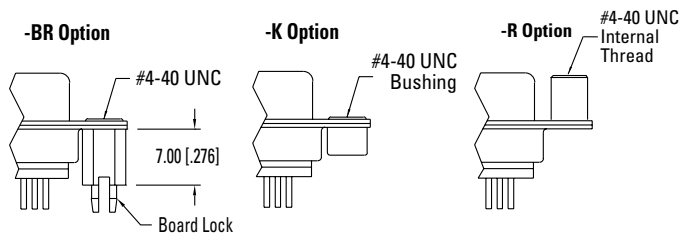
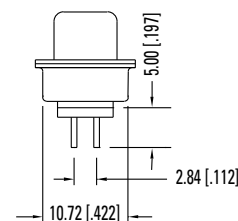
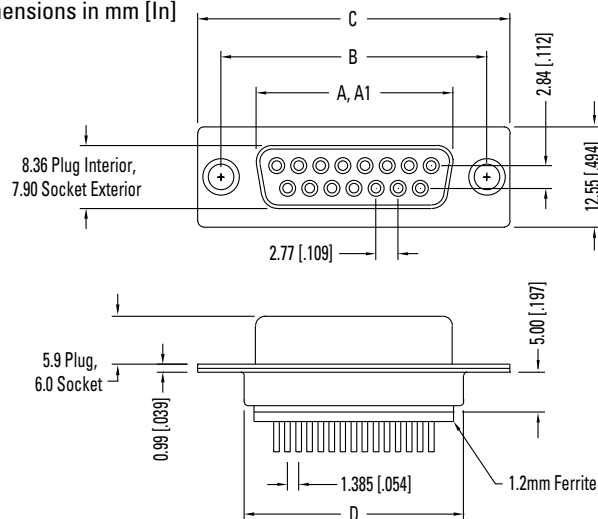
**Plating Options and Performance Specifications** (see page 4)

## FERRITE D-SUBMINIATURE

### KF85 Series

### KF85 Series Dimensions

Dimensions in mm [In]



### Ferrite Specifications

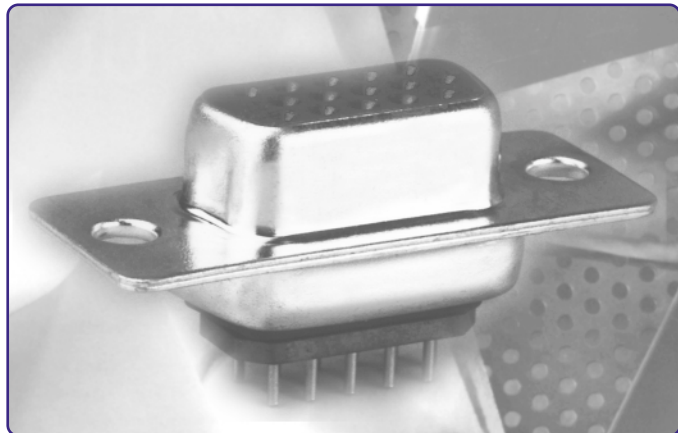
| Test Frequency | Edge Hole  | Inner Hole |
|----------------|------------|------------|
| 30 Mhz         | 10-14 Ohms | 13-17 Ohms |
| 50 Mhz         | 12-18 Ohms | 15-19 Ohms |
| 100 Mhz        | 15-20 Ohms | 19-24 Ohms |

| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              | D              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .755<br>19.18  |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | 1.083<br>27.51 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.614<br>41.00 |
| 37 (C)                          | 2.159<br>54.84       | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | 2.272<br>57.71 |

See K85 series for recommended PCB layout (page 15).

**A = Exterior of Female Shell (S)**

**A1 = Interior of Male Shell (P)**



## KF86 Series Vertical PCB Mount High Density with Ferrite High Frequency EMI/RFI Suppression

### Ordering Information

|        |            |                      |                    |              |                  |                 |
|--------|------------|----------------------|--------------------|--------------|------------------|-----------------|
| KF86   | - E        | D                    | - 15               | S            | - K              |                 |
| Series | Shell Size | Contact Construction | Number of Contacts | Contact Type | Mounting Options | Plating Options |

#### Series

KF86 - Kycon High Density D-Subminiature Connector, Vertical PCB Termination with Ferrite

#### Shell Size

E - 15 Contacts  
A - 26 Contacts  
B - 44 Contacts

#### Contact Construction

D - Precision Formed

#### Number of Contacts

15, 26, 44

#### Contact Type

P - Pin Contact (Plug)  
S - Socket Contact (Receptacle)

#### Mounting Options

K - with Riveted Threaded (4-40) Bushings  
KJ - with Riveted Threaded (4-40) Bushings and (4-40) Hex Jack Screws Installed  
BR - with (4-40) Riveted Threaded Tin Plated Board Lock  
BRJ - with (4-40) Riveted Threaded Tin Plated Board Lock and (4-40) Hex Jack Screws Installed  
R-with Round Riveted Jack Screws

Hex Jack Screws JS-1055 Recommended for BR Option.  
See page 38 for Dimensions .

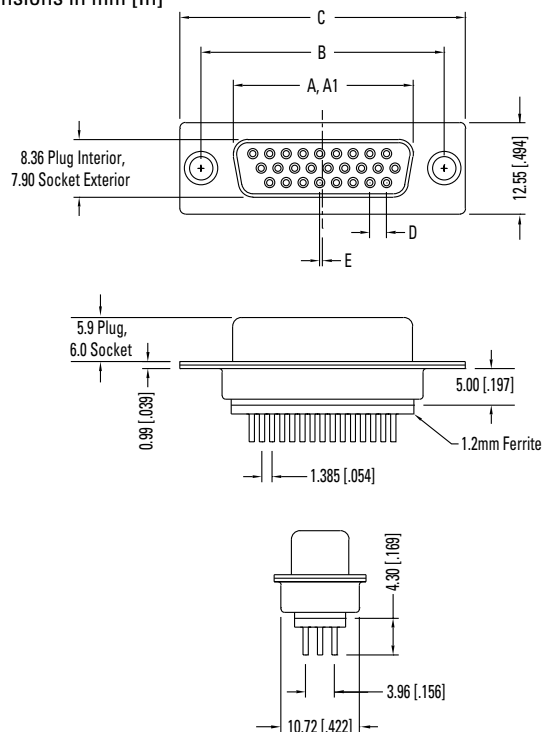
**Plating Options and Performance Specifications** (see page 4)

## FERRITE D-SUBMINIATURE

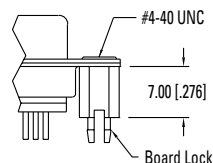
### KF86 Series

### KF86 Series Dimensions

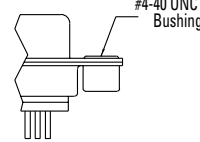
Dimensions in mm [In]



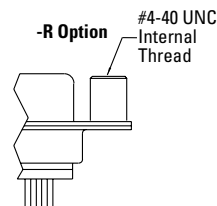
#### -BR Option



#### -K Option



#### -R Option



### Ferrite Specifications

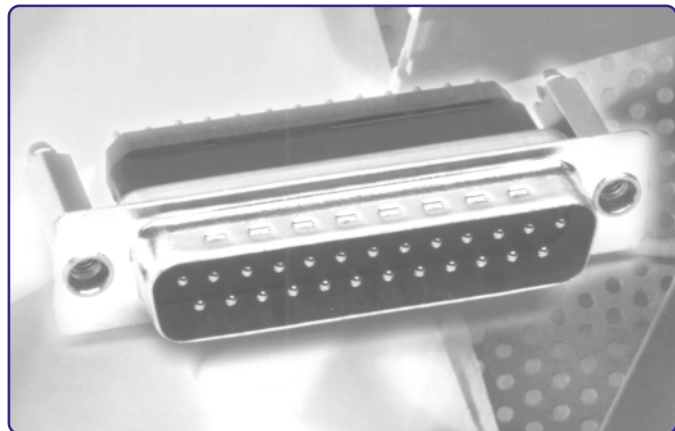
| Test Frequency | Outer Row  | Inner Row  |
|----------------|------------|------------|
| 30 Mhz         | 10-14 Ohms | 13-17 Ohms |
| 50 Mhz         | 12-18 Ohms | 15-19 Ohms |
| 100 Mhz        | 15-20 Ohms | 19-24 Ohms |

| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |              |              |
|---------------------------------|----------------------|----------------|----------------|----------------|--------------|--------------|
|                                 | A                    | A1             | B              | C              | D            | E            |
| 15 (E)                          | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .090<br>2.29 | .010<br>0.25 |
| 26 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | .090<br>2.29 | .020<br>0.51 |
| 44 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | .090<br>2.29 | .020<br>0.51 |

See K86 series for recommended PCB layout (page 17).

**A = Exterior of Female Shell (S)**

**A1 = Interior of Male Shell (P)**



## KF88 Series Vertical PCB Mount High Profile with Ferrite High Frequency EMI/RFI Suppression

### Ordering Information

|        |   |            |  |                      |   |                    |  |              |   |                  |  |                 |
|--------|---|------------|--|----------------------|---|--------------------|--|--------------|---|------------------|--|-----------------|
| KF88   | - | B          |  | D                    | - | 25                 |  | S            | - | K                |  | T               |
| Series |   | Shell Size |  | Contact Construction |   | Number of Contacts |  | Contact Type |   | Mounting Options |  | Plating Options |

#### Series

KF88-Kycon D-Subminiature Connector Vertical PCB Termination, High Profile with Ferrite

#### Shell Size

E-9 Contacts  
A-15 Contacts  
B-25 Contacts  
C-37 Contacts

#### Contact Construction

D-Precision Formed

#### Number of Contacts

9, 15, 25, 37

#### Contact Type

P-Pin Contact (Plug)  
S-Socket Contact (Receptacle)

#### Mounting Options

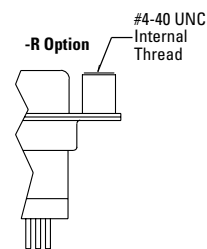
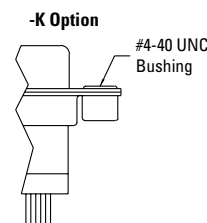
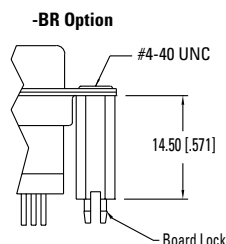
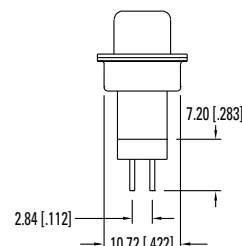
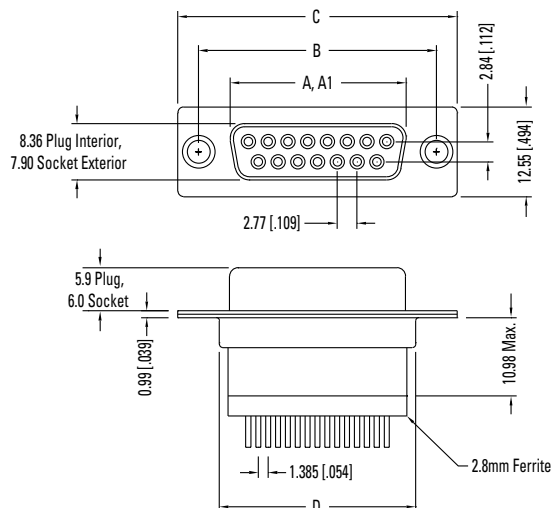
K-with Riveted Threaded (4-40) Bushings  
KJ-with Riveted Threaded (4-40) Bushings and (4-40) Hex Jack Screws Installed  
BR-with (4-40) Riveted Threaded Tin Plated Board Lock  
BRJ-with (4-40) Riveted Threaded Tin Plated Board Lock and (4-40) Hex Jack Screws Installed  
R-with Round Riveted Jack Screws

**Plating Options and Performance Specifications** (see page 4)

## FERRITE D-SUBMINIATURE

### KF88 Series

### KF88 Series Dimensions



Dimensions in mm [In]

| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|----------------|
|                                 | A                    | A1             | B              | C              | D              |
| 9 (E)                           | .643<br>16.33        | .666<br>16.92  | .984<br>24.99  | 1.213<br>30.81 | .755<br>19.18  |
| 15 (A)                          | .971<br>24.66        | .994<br>25.25  | 1.312<br>33.32 | 1.541<br>39.14 | 1.083<br>27.51 |
| 25 (B)                          | 1.511<br>38.38       | 1.534<br>38.96 | 1.852<br>47.04 | 2.088<br>53.04 | 1.614<br>41.00 |
| 37 (C)                          | 2.159<br>54.84       | 2.182<br>55.42 | 2.500<br>63.50 | 2.729<br>69.32 | 2.272<br>57.71 |

### Ferrite Specifications

| Test Frequency | Edge Hole  | Inner Hole |
|----------------|------------|------------|
| 30 Mhz         | 17-27 Ohms | 22-30 Ohms |
| 50 Mhz         | 22-30 Ohms | 29-37 Ohms |
| 100 Mhz        | 29-34 Ohms | 35-40 Ohms |

See K88 series for recommended PCB layout (page 18).

**A = Exterior of Female Shell (S)**

**A1 = Interior of Male Shell (P)**

### Mounting Options

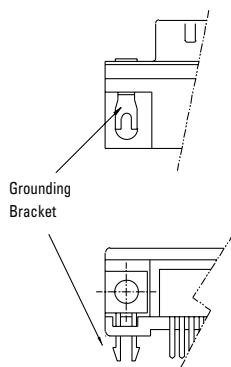
**K22, KF22,**

**K66, KF66**

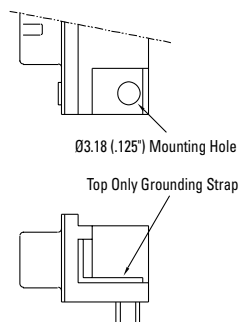
| Front Panel Mounting Options                                     | PCB Mounting Options  |                                                                           |                                                                                              |                     |
|------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|
|                                                                  | Grounding Board Locks | Top Only Grounding Straps with Non-Threaded .125" Diameter Mounting Holes | Wrap Around Grounding Straps with Non-Threaded .125" Diameter Mounting Holes (K22/KF22/Only) | 4 Prong Board Locks |
| Riveted Threaded Inserts                                         | <b>N</b>              | <b>H</b>                                                                  | <b>O</b>                                                                                     | <b>NV</b>           |
| Riveted Threaded Inserts with 4-40 Hex. Jack Screws Installed    | <b>NJ</b>             | <b>HJ</b>                                                                 | <b>OJ</b>                                                                                    | <b>NVJ</b>          |
| 4-40 Round Jackscrews Riveted to Connector                       | <b>NR</b>             | <b>HR</b>                                                                 | <b>OR</b>                                                                                    | <b>NVR</b>          |
| Non-Threaded Riveted Inserts                                     | <b>NT</b>             | <b>HT</b>                                                                 | <b>OT</b>                                                                                    | <b>NVT</b>          |
| Riveted Threaded Inserts with M3/4-40 Hex. Jack Screws Installed | <b>NJM</b>            | <b>HJM</b>                                                                | <b>OJM</b>                                                                                   | <b>NVJM</b>         |

### PC Board Mounting Options

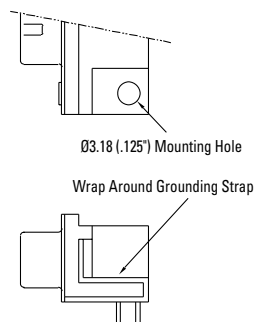
**N Option**



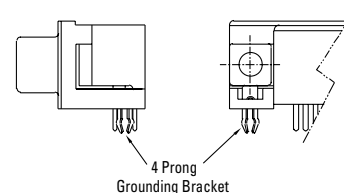
**H Option**



**O Option**



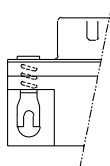
**NV Option**



### Front Panel Mounting Options

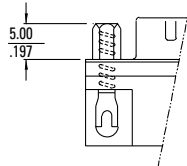
**Standard**

(4-40) Riveted Threaded Insert



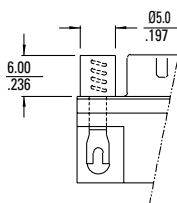
**-J Option**

(4-40) Riveted Threaded Insert with 4-40 Hex. JS1000 Jack Screws Installed to Connector



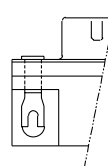
**-R Option**

(4-40) Round Jack Screws Riveted to Connector



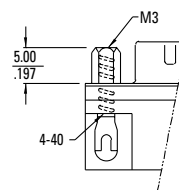
**-T Option**

Riveted Non-Threaded Insert 3.18/.125" Dia.



**-JM Option**

(4-40) Riveted Threaded Insert with M3/4-40 Hex. JS-M3131 Jack Screws Installed to Connector

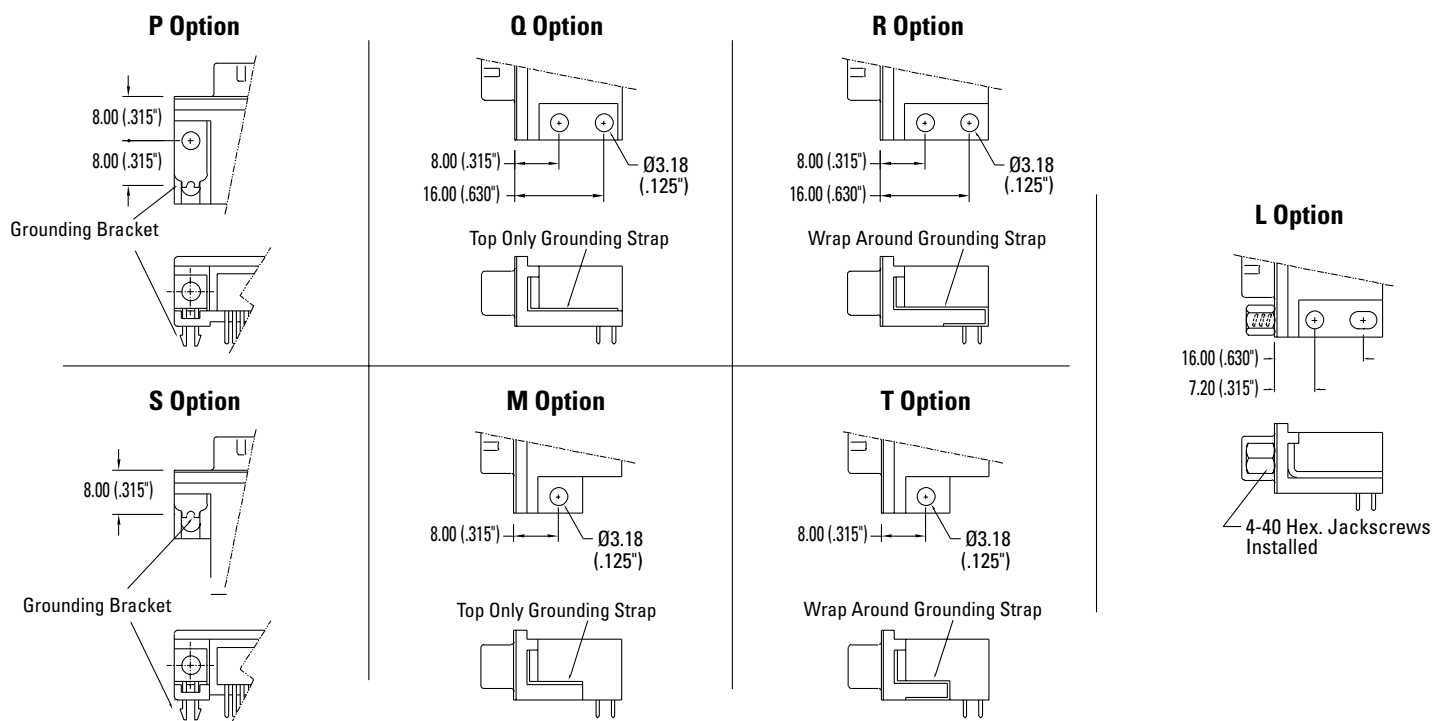


### Mounting Options K44, KF44

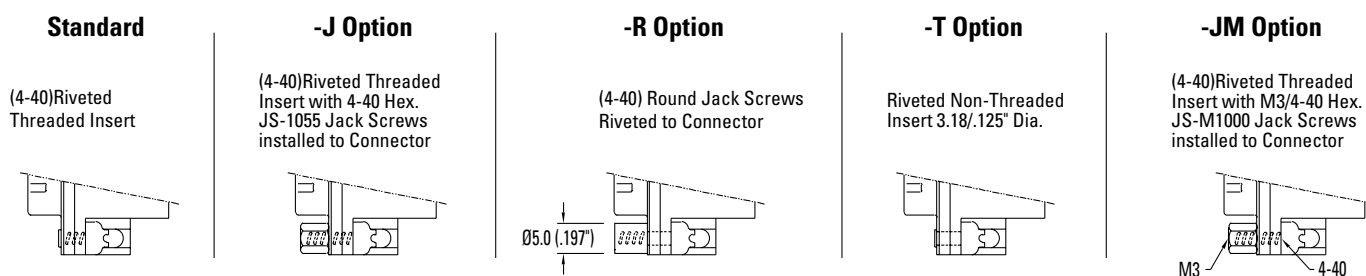
| Front Panel Mounting Options                                     | PCB Mounting Options                                                                                        |                                               |                                                                           |                                                                              |                                        |                                                                                                 |                                                                                                         |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|                                                                  | Both .125" Diameter and Oblong Non-Threaded Mounting Holes and 4-40 Hex. Jack Screws Assembled to Connector | Board Locks and .125" Diameter Mounting Holes | Top Only Grounding Straps with Non-Threaded .125" Diameter Mounting Holes | Wrap Around Grounding Straps with Non-Threaded .125" Diameter Mounting Holes | Short Mounting Flange with Board Locks | Short Mounting Flange Top Only Grounding Straps with Non-Threaded .125" Diameter Mounting Holes | Short Mounting Flange with Wrap Around Grounding Straps with Non-Threaded .125" Diameter Mounting Holes |
| Riveted Threaded Inserts                                         | <b>Not Available</b>                                                                                        | <b>P</b>                                      | <b>Q</b>                                                                  | <b>R</b>                                                                     | <b>S</b>                               | <b>M</b>                                                                                        | <b>T</b>                                                                                                |
| Riveted Threaded Inserts with 4-40 Hex. Jack Screws Installed    | <b>L*</b>                                                                                                   | <b>PJ</b>                                     | <b>QJ</b>                                                                 | <b>RJ</b>                                                                    | <b>SJ</b>                              | <b>MJ</b>                                                                                       | <b>TJ</b>                                                                                               |
| 4-40 Round Jackscrews Riveted to Connector                       | <b>Not Available</b>                                                                                        | <b>PR</b>                                     | <b>QR</b>                                                                 | <b>RR</b>                                                                    | <b>SR</b>                              | <b>MR</b>                                                                                       | <b>TR</b>                                                                                               |
| Non-Threaded Riveted Inserts                                     | <b>Not Available</b>                                                                                        | <b>PT</b>                                     | <b>QT</b>                                                                 | <b>RT</b>                                                                    | <b>ST</b>                              | <b>MT</b>                                                                                       | <b>TT</b>                                                                                               |
| Riveted Threaded Inserts with M3/4-40 Hex. Jack Screws Installed | <b>Not Available</b>                                                                                        | <b>PJM</b>                                    | <b>QJM</b>                                                                | <b>RJM</b>                                                                   | <b>SJM</b>                             | <b>MJM</b>                                                                                      | <b>TJM</b>                                                                                              |

\*Removal of jack screws will cause disassembly of L option part. Dimensions in mm [In]

### PC Board Mounting Options



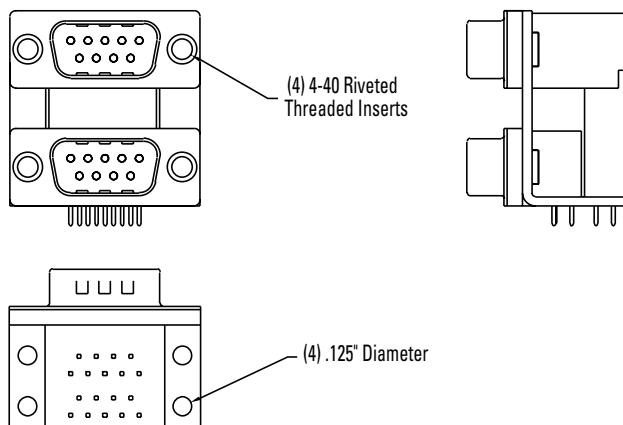
### Front Panel Mounting Options



## Mounting Options K42, KF42

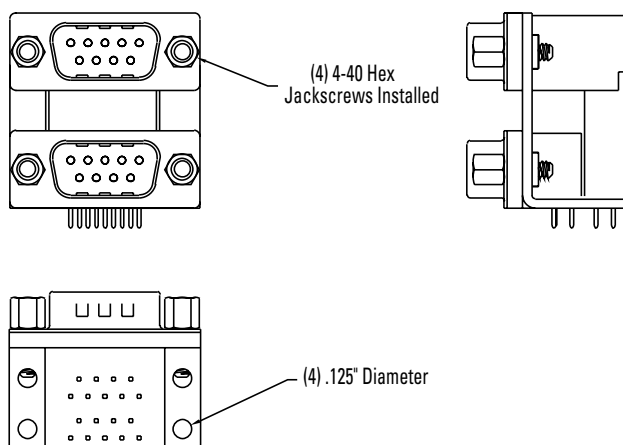
### Standard

With .125 Diameter Mounting Holes and 4-40 Riveted Threaded Inserts



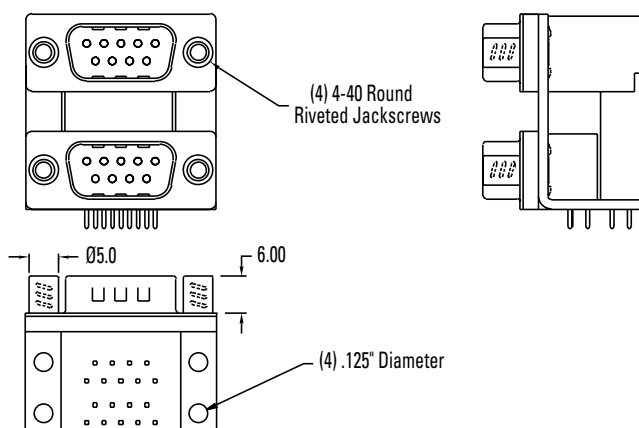
### J

With .125 Diameter Mounting Holes and 4-40 Hex Jack Screws Installed



### R

With .125 Diameter Mounting Holes and 4-40 Round Jack Screws Riveted to Connector

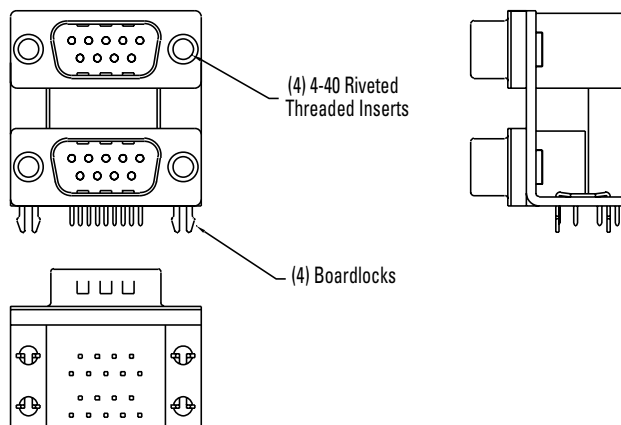


## MULTIPORT D-SUBMINIATURE

### Mounting Options

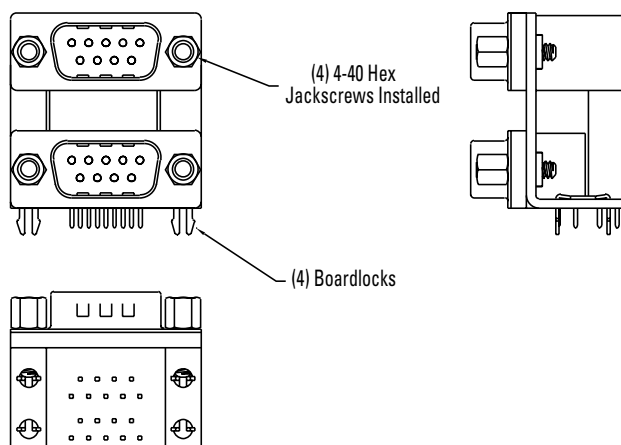
### 4N

With Four Board Locks and 4-40 Riveted Threaded Inserts



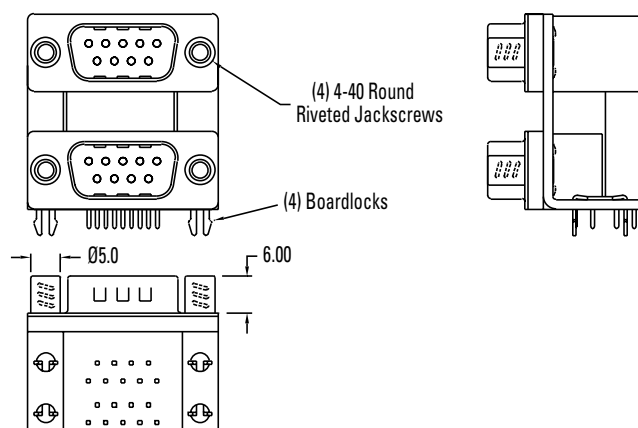
### 4NJ

With Four Board Locks and 4-40 Hex Jack Screws Installed



### 4NR

With Four Board Locks and 4-40 Round Jack Screws Riveted to Connector

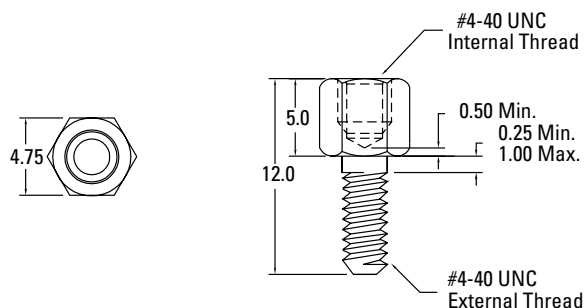


## D-Subminiature Hardware

Dimensions in mm

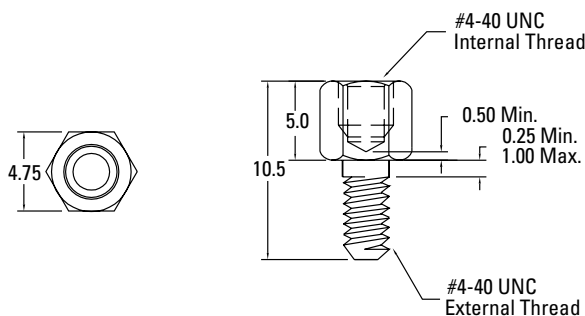
### JS-1000

4-40 Female Hex. Jack Screw Bulk (500/Bag)



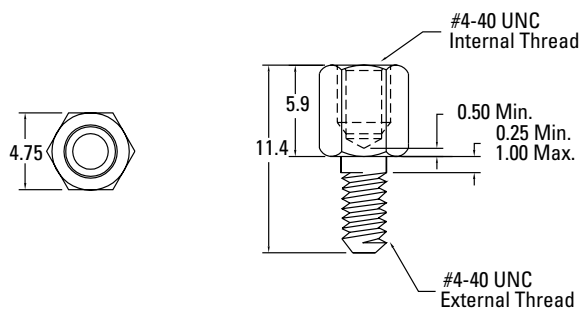
### JS-1055

4-40 Female Hex. Jack Screw Bulk (500/Bag)



### JS-1055-5.9

4-40 Female Hex. Jack Screw Bulk (500/Bag)

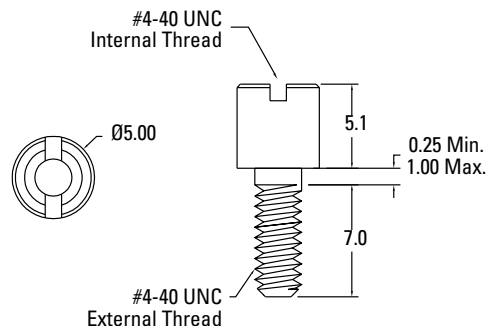


## D-SUBMINIATURE CONNECTORS

### Hardware

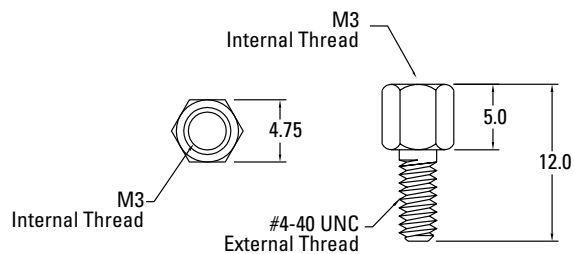
### JS-2000

4-40 Female Round Jack Screw Slotted Bulk (500/Bag)



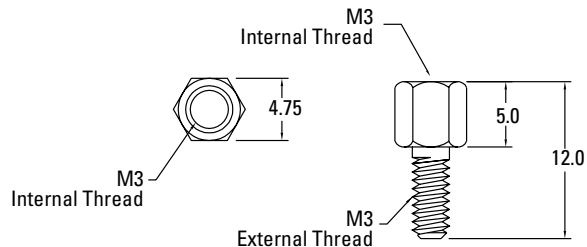
### JS-M3131

4-40 External,  
M3 Metric Internal Thread Jack Screw Bulk (500/Bag)



### JS-M3131M

M3 External,  
M3 Metric Internal Thread Jack Screw Bulk (500/Bag)



**KYCON continues its leadership in High Frequency I/O Connectors by offering a complete line of sizes and options.**

**Features:**

- Various options available
- CSA/NRTL Certified File No. LR78160
- Through Hole and Surface Mount
- Right Angle, Vertical and Upright Types
- Connectors for High Speed Transfer
- Contact Factory for Other Options



# HIGH FREQUENCY I/O CONNECTORS

## Directory

### Universal Serial Bus

|                                                 |           |
|-------------------------------------------------|-----------|
| <b>KUSB - Right Angle, Single &amp; Stacked</b> | <b>40</b> |
| <b>KUSBV - Vertical</b>                         | <b>42</b> |
| <b>KMB - Mini</b>                               | <b>43</b> |
| <b>GSP - Combination RJ45 over Stacked USB</b>  | <b>55</b> |



### IEEE 1394 Connectors

|                             |           |
|-----------------------------|-----------|
| <b>KFWS - Surface Mount</b> | <b>44</b> |
| <b>KFWS - Upright</b>       | <b>45</b> |



### Digital Visual Interface

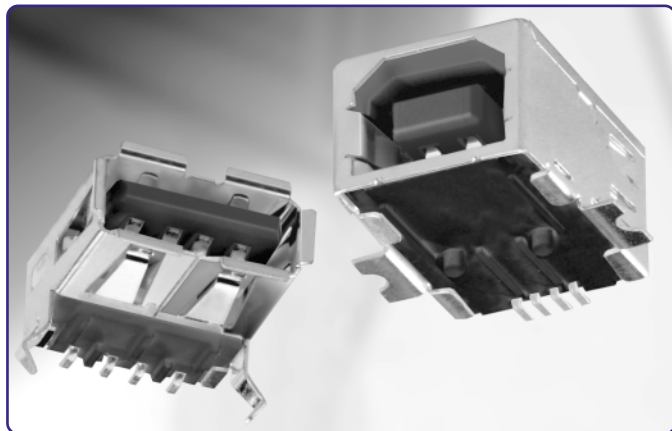
|                          |           |
|--------------------------|-----------|
| <b>KVI - Right Angle</b> | <b>46</b> |
|--------------------------|-----------|



### SCSI Connectors

|                                                |           |
|------------------------------------------------|-----------|
| <b>K77 - Right Angle, Single &amp; Stacked</b> | <b>48</b> |
|------------------------------------------------|-----------|





## KUSB Series Right Angle Universal Serial Bus

### Features



- PCB Mount and Surface Mount Available
- Compatible With Many Computer Peripherals
- A and B Types Available
- Supports Hot Plugging
- Meets USB 1.1 and 2.0 Specifications
- Contact Area with Gold Plating
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Shell

Phosphor Bronze

##### Insulator

Standard: Black (-BLK) or White (-WHT) 

PBT Thermoplastic, UL94V-0 Rated

SMT: Black (-B) or White (-W)

High Temperature Thermoplastic, UL94V-0 Rated

##### Contacts

Phosphor Bronze

##### Contact Plating

Gold over Nickel on Contacts

Tin/Lead over Nickel on Termination End

### Electrical Characteristics

#### Rated Voltage

30V AC

#### Contact Current Rating

1 Amp DC Max.

#### Contact Resistance

15 Milliohms Max.

#### Insulation Resistance

1000 Megohms Min.

#### Dielectric Withstanding Voltage

750V AC For 1 Minute

#### Operating Temperature

-25°C to +80°C

## UNIVERSAL SERIAL BUS

### KUSB Series

### Ordering Information

|        |   |            |                 |           |
|--------|---|------------|-----------------|-----------|
| KUSB   | - | AS-1-N-BLK | 30              |           |
| Series |   | Type       | Plating Options | Packaging |

#### Series

KUSB - Right Angle Universal Serial Bus

#### Type

AS-1-N-BLK - A-Type Black

AS-1-N-WHT - A-Type White

AS-2-N-BLK - Stacked A-Type Black

AS-2-N-WHT - Stacked A-Type White

BS-1-N-BLK - B-Type Black

BS-1-N-WHT - B-Type White

SMT-AS1N-B - SMT A-Type Black

SMT-AS1N-W - SMT A-Type White

SMT-BS1N-B - SMT B-Type Black

SMT-BS1N-W - SMT B-Type White

#### Plating Options

Blank - Gold flash

30 - 30µ" Gold

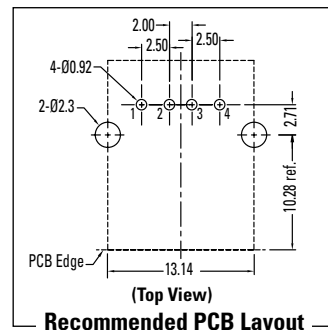
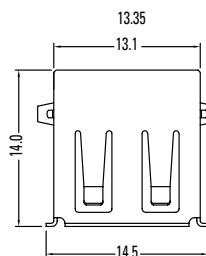
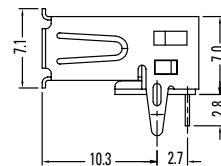
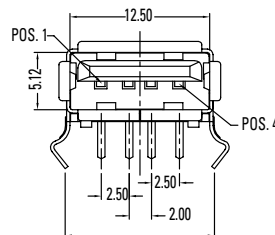
#### Packaging

Blank - Bulk

TR - Tape and Reel (SMT version only)

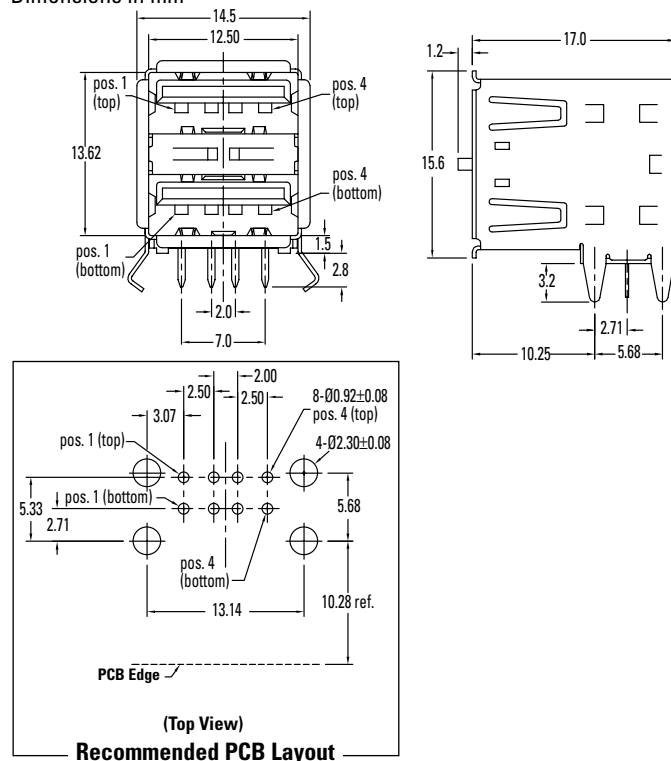
### KUSB-AS-1-N-BLK or -WHT

Dimensions in mm



**KUSB-AS-2-N-BLK or -WHT**

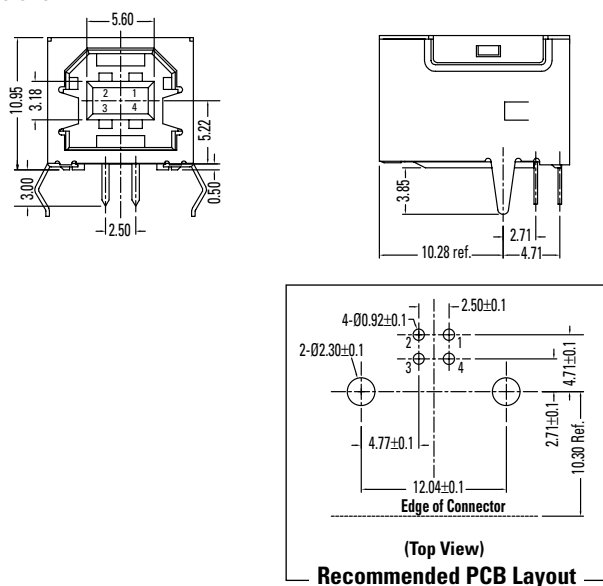
Dimensions in mm



## ***KUSB Series Dimensions***

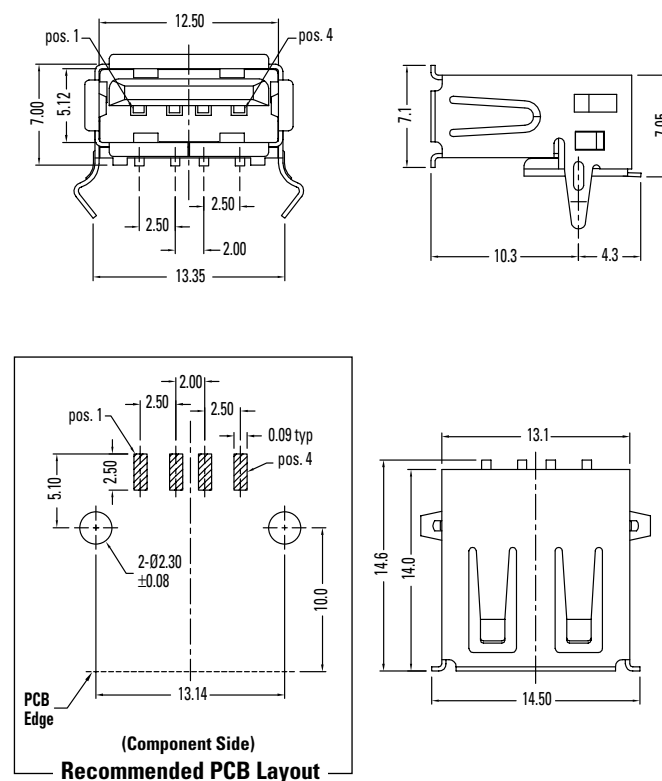
**KUSB-BS-1-N-BLK or -WHT**

Dimensions in mm



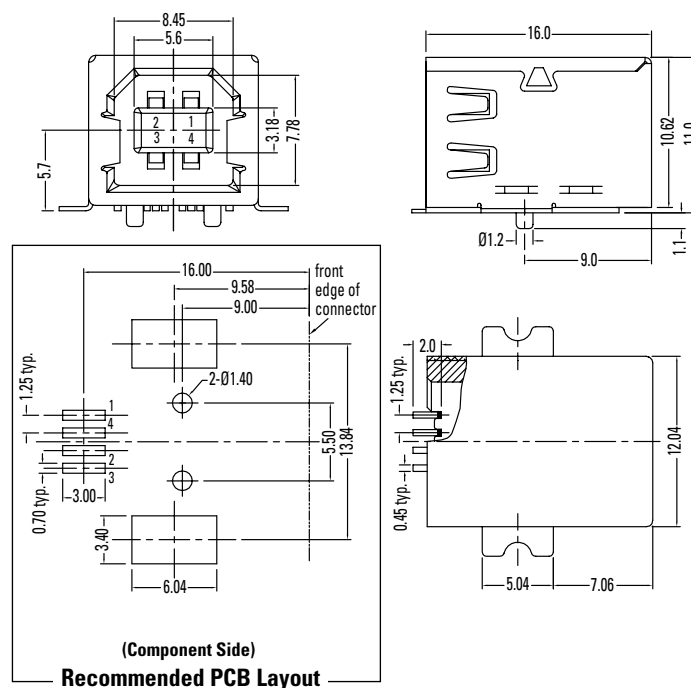
## KUSB-SMT-AS1N-B or -W

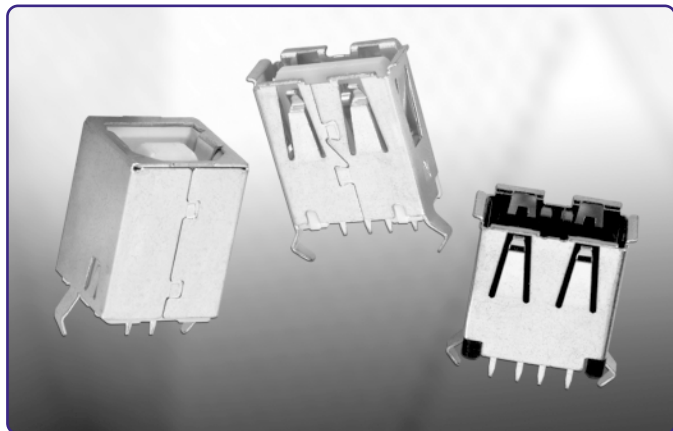
Dimensions in mm



### KUSB-SMT-BS1N-B or -W

Dimensions in mm





## KUSBV Series Vertical, Top Entry Universal Serial Bus

### Features



- Vertical Top Entry
- Compatible With Many Computer Peripherals
- A and B Types Available
- Supports Hot Plugging
- Meets USB 1.1 and 2.0 Specifications
- Contact Area with Gold Plating
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Shell

Phosphor Bronze

##### Insulator

Black (-BLK) or White (-WHT) 

PBT Thermoplastic, UL94V-0 Rated

##### Contacts

Phosphor Bronze

##### Contact Plating

Gold over Nickel on Contacts

Tin/Lead over Nickel on Termination End

### Electrical Characteristics

#### Rated Voltage

30V AC

#### Contact Current Rating

1 Amp DC Max.

#### Contact Resistance

15 Milliohms Max.

#### Insulation Resistance

1000 Megohms Min.

#### Dielectric Withstanding Voltage

750V AC For 1 Minute

#### Operating Temperature

-25°C to +80°C

## UNIVERSAL SERIAL BUS

### KUSBV Series

### Ordering Information

|        |            |                 |
|--------|------------|-----------------|
| KUSBV  | AS-1-N-BLK | 30              |
| Series | Type       | Plating Options |

#### Series

KUSBV - Vertical Top Entry Universal Serial Bus

#### Type

AS-1-N-BLK - A-Type Black

AS-1-N-WHT - A-Type White

BS-1-N-BLK - B-Type Black

BS-1-N-WHT - B-Type White

#### Plating Options

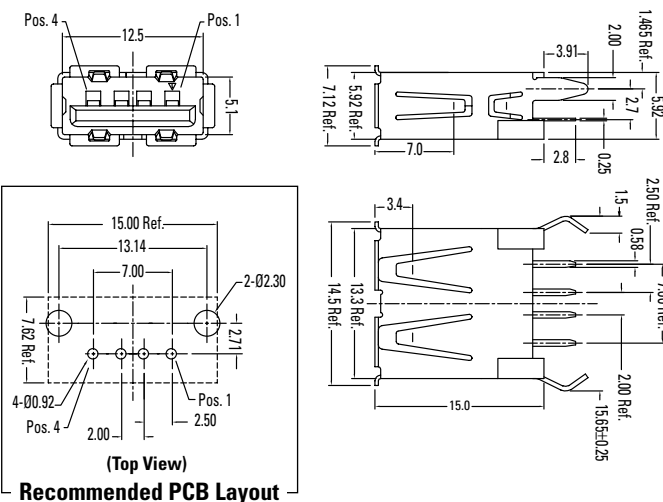
Blank - Gold Flash

30 - 30μ" Gold

### KUSBV Series Dimensions

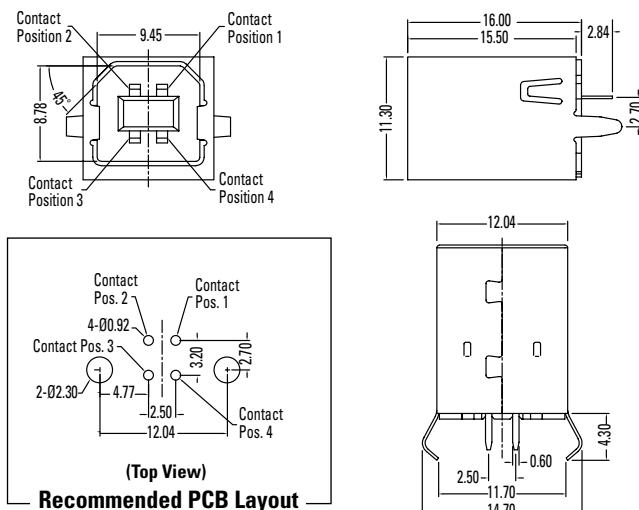
#### KUSBV-AS-1-N-BLK or -WHT

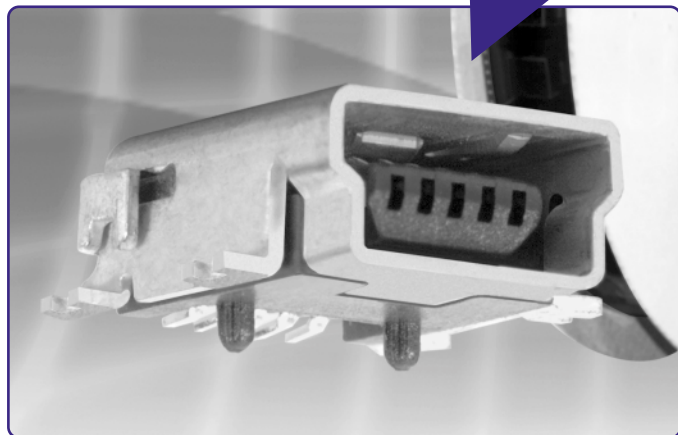
Dimensions in mm



#### KUSBV-BS-1-N-BLK or -WHT

Dimensions in mm





## KMB-SMT Series Mini USB B-Type Socket

### Features



- Footprint is 1/3 the Size of Standard USB
- Surface Mount
- Indentations for Grounding and Mating Retention
- Meets USB 2.0 Specification
- Contact Area with Gold Plating
- CSA/NRTL/US Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Shell

Copper Alloy, Tin or Nickel Plated

##### Insulator

PA6T Thermoplastic, UL94V-0 Rated, Black Color



##### Contacts

Phosphor Bronze

##### Plating

Standard - 30μ" Gold on Contact Area 3.8μm (150μ")  
Tin/Lead on Solder tail, all over 1.27μm (50μ") Nickel.

### Electrical Characteristics

#### Voltage Rating

30V AC

#### Contact Current Rating

1 Amp Max.

#### Contact Resistance

50 Milliohms Max.

#### Insulation Resistance

1000 Megohms Min.

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Operating Temperature

0°C to +50°C

## MINI USB CONNECTOR

### KMB-SMT Series

### Ordering Information

| KMB    | - | SMT   | - | 5S                 | - | S             | - | 30             | - | TR        |
|--------|---|-------|---|--------------------|---|---------------|---|----------------|---|-----------|
| Series |   | Style |   | Number of Contacts |   | Shield Option |   | Plating Option |   | Packaging |

#### Series

KMB - Mini USB

#### Style

SMT - Surface Mount with Locating Posts

SMT4 - Surface Mount without Locating Posts

#### Number of Contacts

5S - 5 Pin Socket

#### Shield Options

S - Shielded

#### Plating

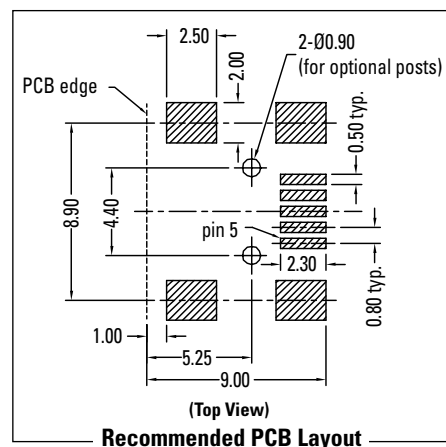
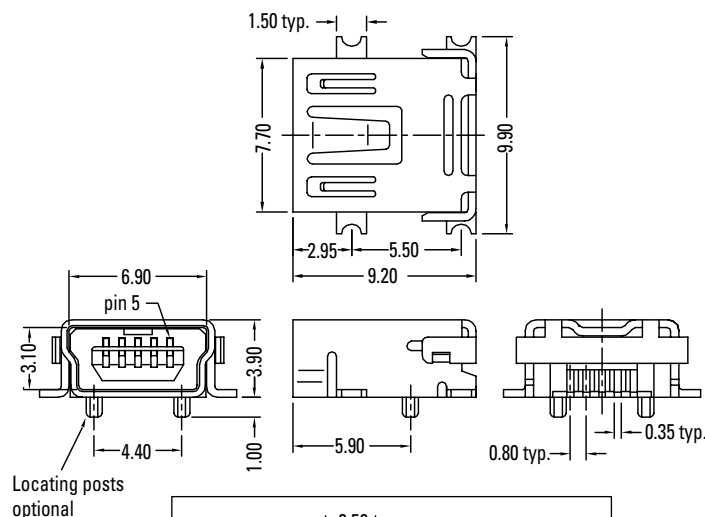
30 - 30μ" Gold Plating

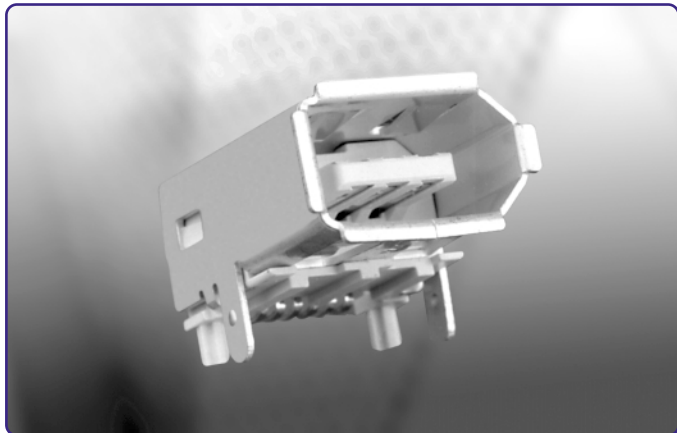
#### Packaging

TR - Tape and Reel

### KMB-SMT Series Dimensions

Dimensions in mm





## KFWS Series Right Angle Surface Mount IEEE 1394 Socket

### Features



- Supports Hot Plugging
- Rated 400 Mbps
- Surface Mount Technology for Electrical Connections
- Tin Lead Plated Solder Tails for Excellent Solderability
- Contact Area with Gold Plating
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Shell:** Copper Alloy, Nickel Plating

**Insulator:** High Temperature Thermoplastic, UL94V-0 Rated

**Contacts:** Phosphor Bronze

**Plating:** Standard - 30µ" Gold over Nickel on Contact Area  
Tin/Lead Over Nickel on Solderails

### Mechanical Characteristics

**Durability:** 1500 Cycles Min.

**Insertion Force:** 3.6kg Max.

**Extraction Force:** 1.0kg Min.

### Electrical Characteristics

**Voltage Rating:** 30V AC

**Contact Current Rating:** 1 Amp DC Max. Per Contact Not To  
Exceed 30°C Temp. Rise

**Dielectric Withstanding Voltage:** 750 V AC for 1 Minute

**Capacitance:** 2pF Max.

**Contact Resistance:** Less Than 30 Milliohms per Contact Pair  
After 1500 Mating Cycles

**Insulation Resistance:** Greater than 100 Megohms

**Operating Temperature:** -55°C to +85°C

## IEEE 1394 CONNECTORS

### KFWS - SMT Series

### Ordering Information

|        |   |         |       |   |                |
|--------|---|---------|-------|---|----------------|
| KFWS   | — | SMT-100 | W     | — | 30             |
| Series |   | Style   | Color |   | Plating Option |

#### Series

KFWS - Single IEEE 1394 Socket

#### Style

SMT-100 - Right Angle Surface Mount

#### Color

W - White

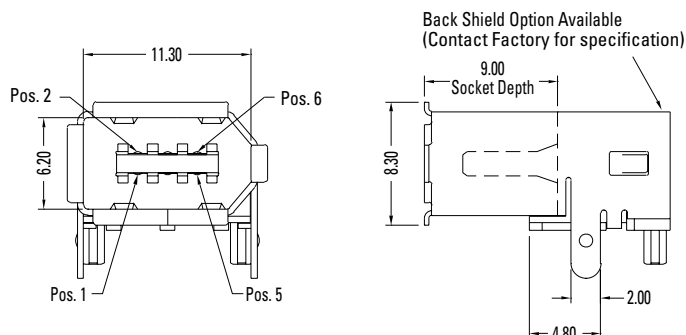
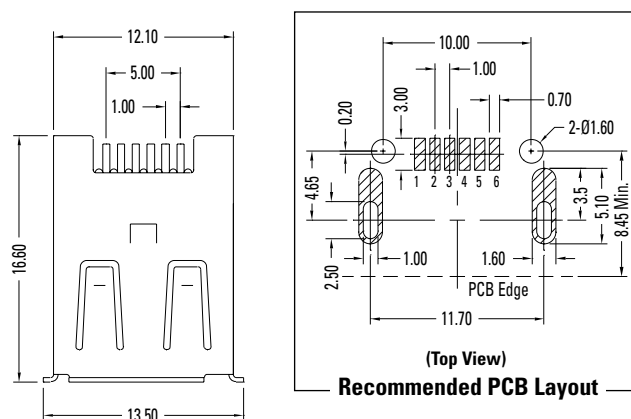
B - Black

#### Plating

30 - 30µ" Gold Plating

### KFWS-SMT Series Dimensions

Dimensions in mm





*KFWS Series  
Vertical Upright  
PCB Mount  
IEEE 1394 Socket*

## Features



- Supports Hot Plugging
- Rated 400 Mbps
- Tin Lead Plated Solder Tails for Excellent Solderability
- Contact Area with Gold Plating
- CSA/NRTL Certified File No. LR78160

## Performance Specifications

## Materials and Finish

**Shell:** Copper Alloy, Tin or Nickel Plating

**Insulator:** PBT Thermoplastic, UL94V-0 Rated

**Contacts:** Phosphor Bronze

**Plating:** Standard - 30μ" Gold over Nickel on Contact Area  
Tin/Lead Over Nickel on Solder tails



### ***Mechanical Characteristics***

**Durability:** 1500 Cycles Min.

**Insertion Force: 3.6kg Max.**

**Extraction Force:** 1.0kg Min.

### ***Electrical Characteristics***

**Voltage Rating:** 30V AC

**Contact Current Rating:** 1 Amp DC Max. Per Contact Not To Exceed 30°C Temp. Rise

**Dielectric Withstanding Voltage:** 750 V AC for 1 Minute  
**Capacitance:** 2pF Max.

**Contact Resistance:** Less Than 30 Milliohms per Contact Pair  
After 1500 Mating Cycles

**Insulation Resistance:** Greater than 100 Megohms  
**Operating Temperature:** -55°C to +85°C

### ***Ordering Information***

|        |   |       |       |   |                   |
|--------|---|-------|-------|---|-------------------|
| KFWS   | – | V-100 | W     | – | 30                |
|        |   |       |       |   |                   |
| Series |   | Style | Color |   | Plating<br>Option |

## Series

KFWS - Single IEEE 1394 Socket

## Style

**V-100 - Vertical Upright PCB Mount**

## Color

W - White

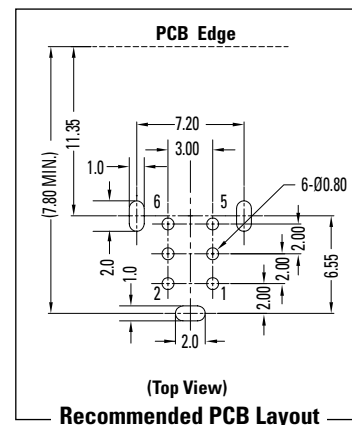
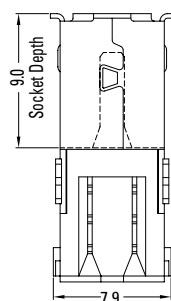
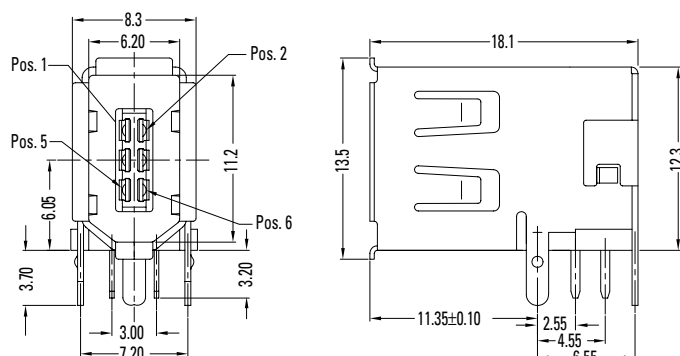
B- Black

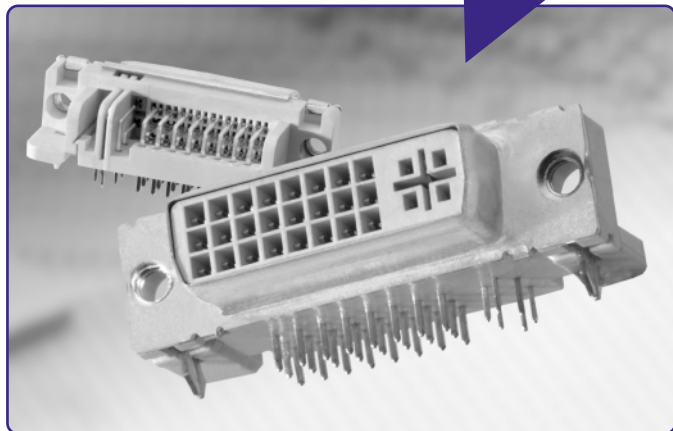
## Plating

30 - 30μ" Gold Plating

### ***KFWS-V Series Dimensions***

Dimensions in mm





## KVI Series Digital Visual Interface

### Features



- Digital and Digital/Analog Pinouts
- Supports 1.65 Gbps Digital and 2.5Ghz Analog
- Conforms to Digital Display Working Group DVI Standard
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Material and Finish

##### Shell

Steel, Tin Plated

##### Insulator



Black or White Thermoplastic, UL94V-0 Rated,

##### Contact Material

Copper Alloy

### Electrical Specifications

#### Current Rating

1.5 Amps Min.

#### Voltage Rating

40V DC

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Insulation Resistance

More than 1000 Megohms at 500V DC

#### Contact Resistance

20 Milliohms Max

#### Temperature Rating

-20°C to +80°C

## DIGITAL VISUAL INTERFACE

### KVI Series

### Mechanical Specifications

#### Insertion Force

4.5kg (10 lbs) Max

#### Withdrawal Force

1.0kg (2.2 lbs) Min

#### Durability

100 Cycles

#### Vibration

No Discontinuity >1us

### Ordering Information

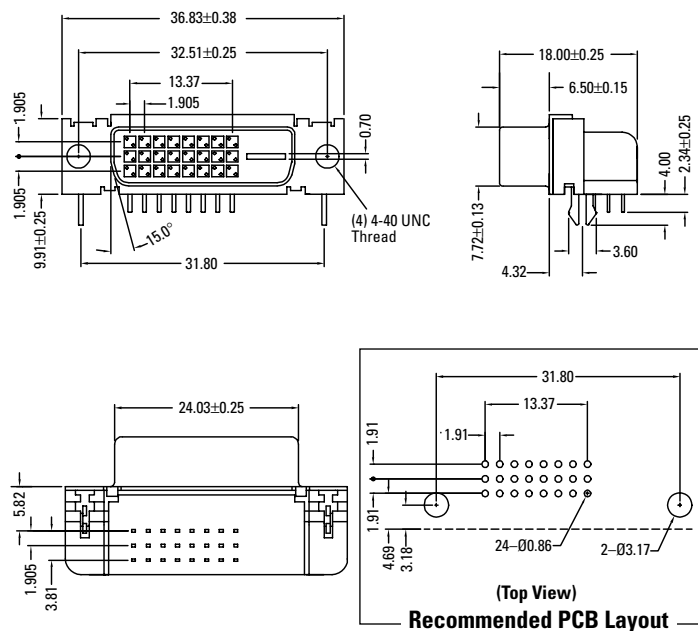
| KVI                                                                                                                                           | - | DA                                                                                   | 29                 | S            | - | N               | - | W     | 30              |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------|--------------------|--------------|---|-----------------|---|-------|-----------------|
| Series                                                                                                                                        |   | Type                                                                                 | Number of Contacts | Contact Type |   | Mounting Option |   | Color | Plating Options |
| <b>Series</b><br>KVI - Digital Visual Interface                                                                                               |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Type</b><br>DA-Digital/Analog Interface (29 Contact)<br>DG-Digital Interface (24 Contact)                                                  |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Number of Contacts</b><br>24, 29                                                                                                           |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Contact Type</b><br>S-Socket Contact (Receptacle)                                                                                          |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Mounting Option</b><br>N-Board Locks* and 4-40 Riveted Threaded Inserts<br>FP-Board Locks*, 4-40 Riveted Threaded Inserts and Plastic Pegs |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Color</b><br>B - Black<br>W - White                                                                                                        |   |                                                                                      |                    |              |   |                 |   |       |                 |
| <b>Plating Options</b>                                                                                                                        |   |                                                                                      |                    |              |   |                 |   |       |                 |
| Standard                                                                                                                                      |   | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails              |                    |              |   |                 |   |       |                 |
| 30                                                                                                                                            |   | 30µ" Gold over Nickel on mating end of contacts. Tin/lead over Nickel on soldertails |                    |              |   |                 |   |       |                 |

\*Please note difference in design and mounting

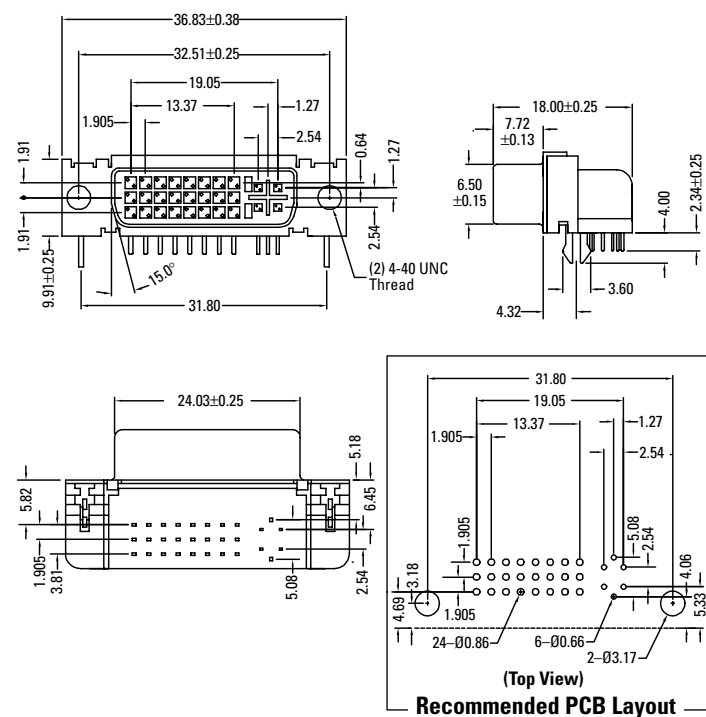
## KVI Series Dimensions

Dimensions in mm

### KVI-DG24S-N



### KVI-DA29S-N



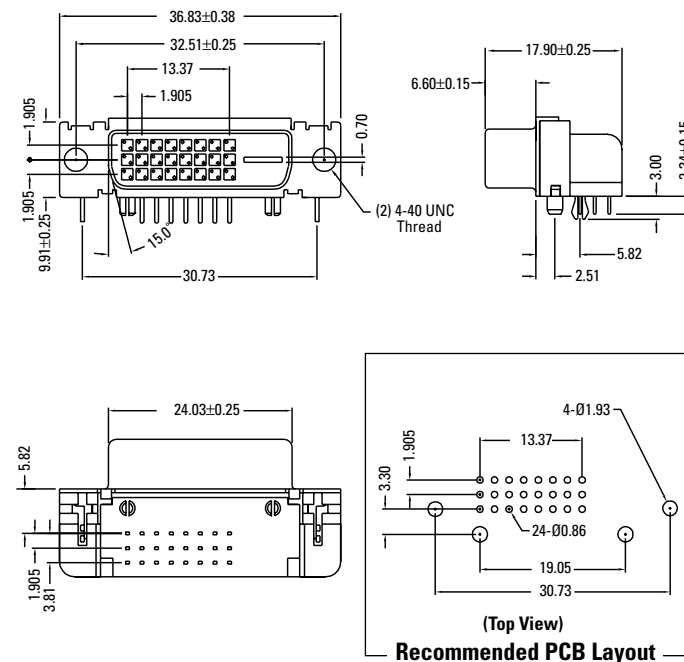
## DIGITAL VISUAL INTERFACE

### KVI Series

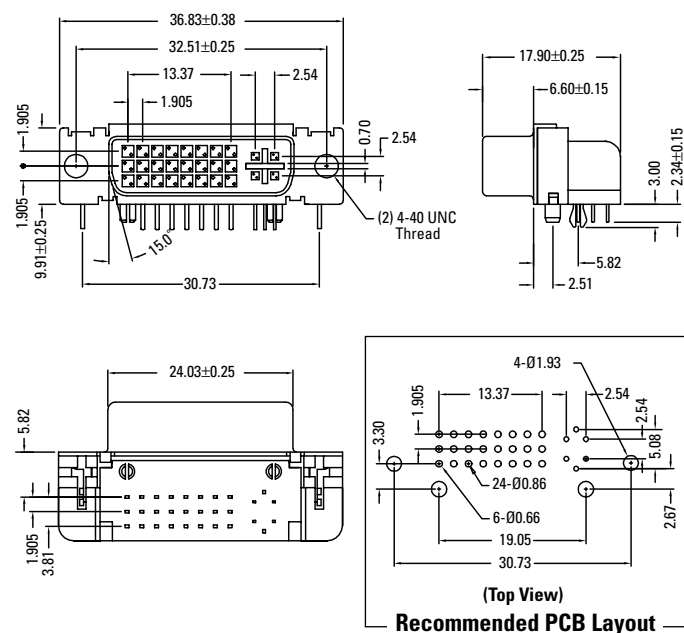
## KVI Series Dimensions

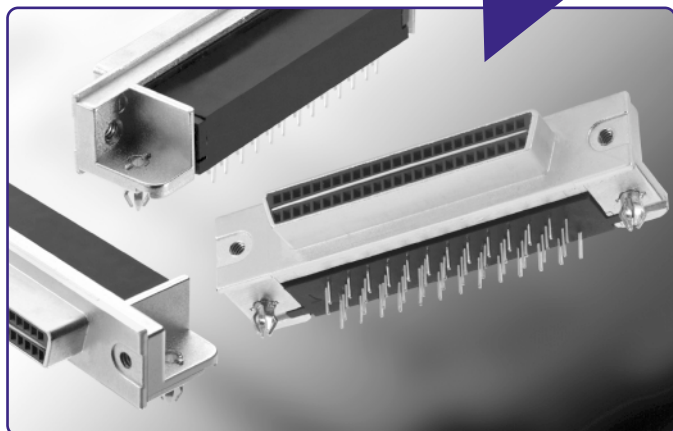
Dimensions in mm

### KVI-DG24S-FP



### KVI-DA29S-FP





## K77 Series Right Angle PCB Mount SCSI

### Features



- 50 and 68 Position Right Angle Small Computer System Interface Receptacles
- Optional Cable Latches
- Single or Stacked
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Housing Material**  
PBT, UL94V-0 Rated, Black Color

**Contact Material**

Phosphor Bronze

**Contact Plating**

Gold Plating over Nickel

### Electrical Characteristics

**Insulation Resistance**

1000 Megohms Min.

**Dielectric Withstanding Voltage**

500 VAC for 1 Minute

**Contact Resistance**

25 Milliohms Max.

**Current Rating**

1.0 Amp @ 30V

**Operating Temperature**

-55°C to +85°C

## SCSI

### K77 Series

### Ordering Information

| K77    | — | 50S           | —                        | N               |                |
|--------|---|---------------|--------------------------|-----------------|----------------|
| Series |   | Configuration |                          | Mounting Option | Plating Option |
|        |   |               | Center to Center Spacing |                 |                |

#### Series

K77 - Right Angle SCSI Connector

#### Configuration

50S - 50 Socket Contacts

68S - 68 Socket Contacts

50S/50S - 50 Socket Contacts over 50 Socket Contacts

68S/68S - 68 Socket Contacts over 68 Socket Contacts

#### Center to Center Spacing

Blank - Single

D - Stacked 0.5" (12.70mm)

#### Mounting Option

N-Board Locks and 4-40 Riveted Threaded Inserts

W-Board Locks and 2-56 Riveted Threaded Inserts

NL-Board Locks, 4-40 Threaded Inserts, Cable Latches

WL-Board Locks, 2-56 Threaded Inserts, Cable Latches

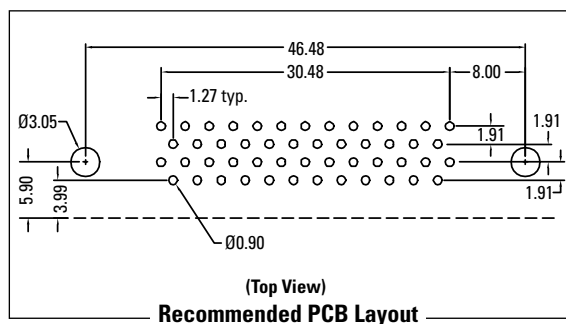
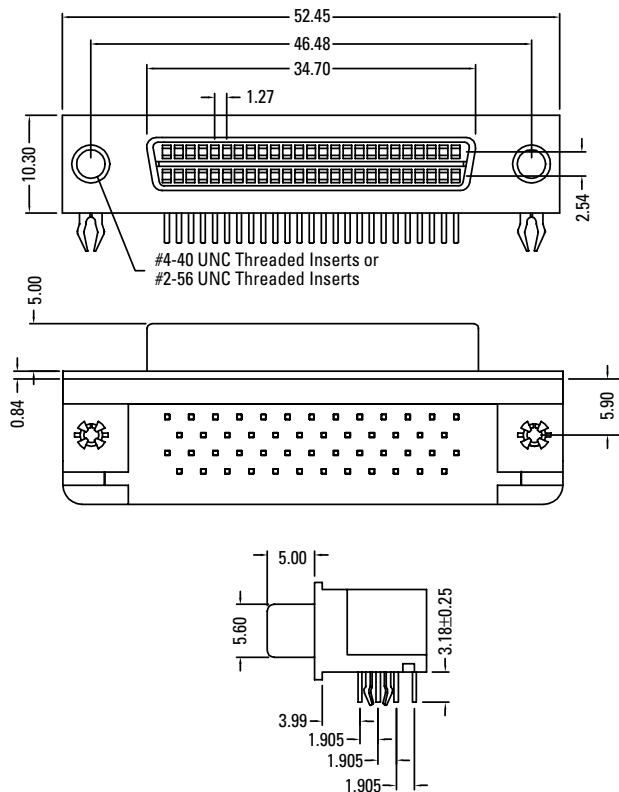
#### Plating Option

|          |                                                                                       |
|----------|---------------------------------------------------------------------------------------|
| Standard | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails               |
| 30       | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |

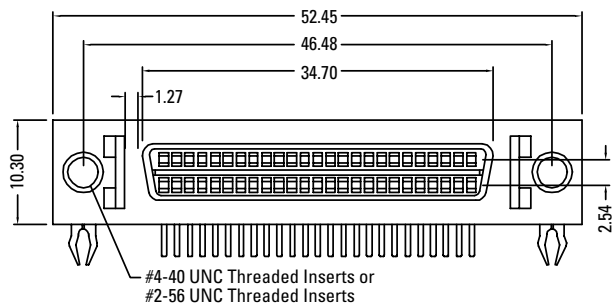
## K77 Series Dimensions

Dimensions in mm

### K77-50S-N, K77-50S-W



### K77-50S-NL, K77-50S-WL



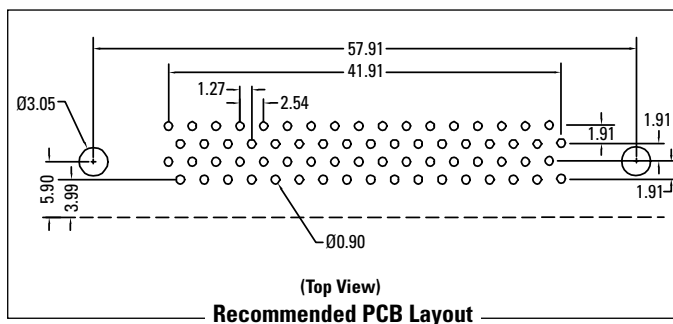
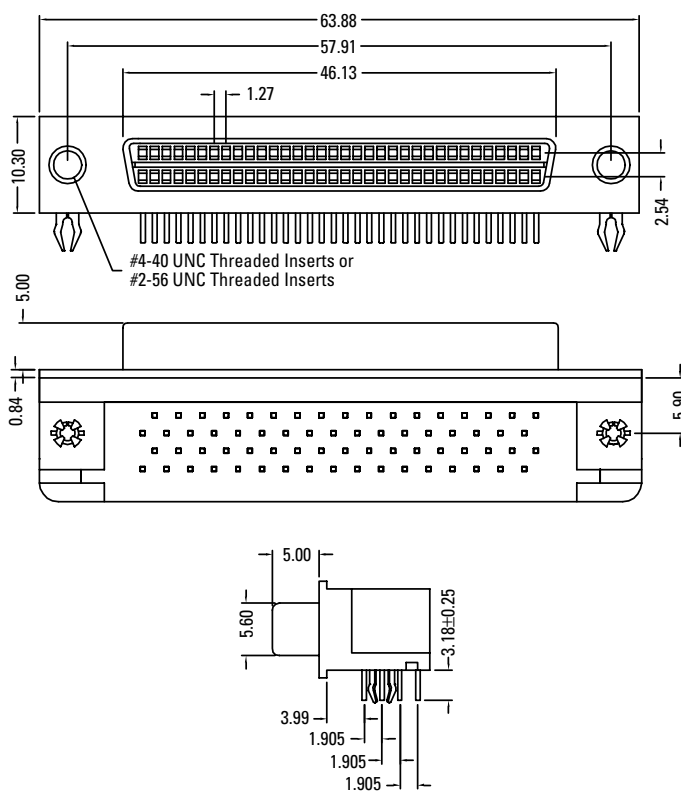
## SCSI

## K77 Series

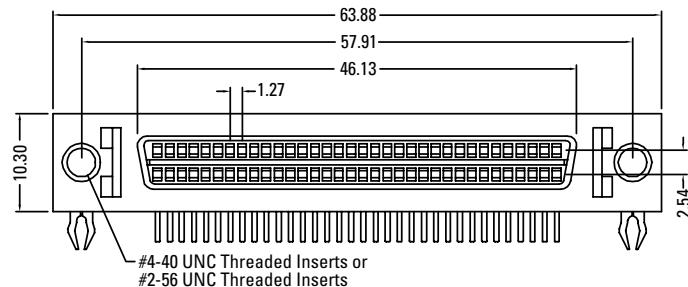
## K77 Series Dimensions

Dimensions in mm

### K77-68S-N, K77-68S-W



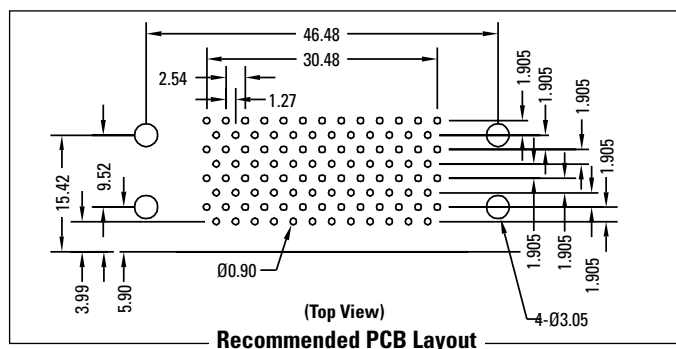
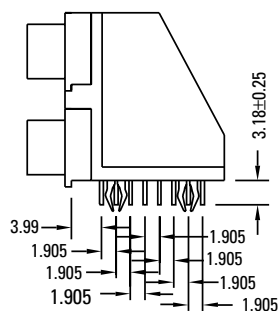
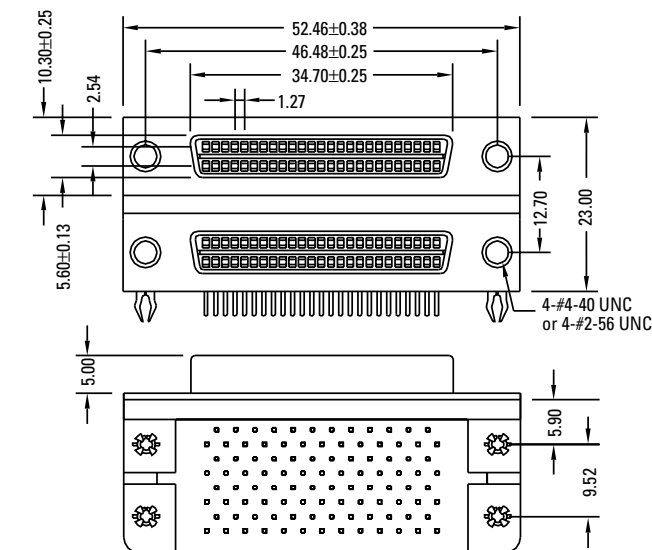
### K77-68S-NL, K77-68S-WL



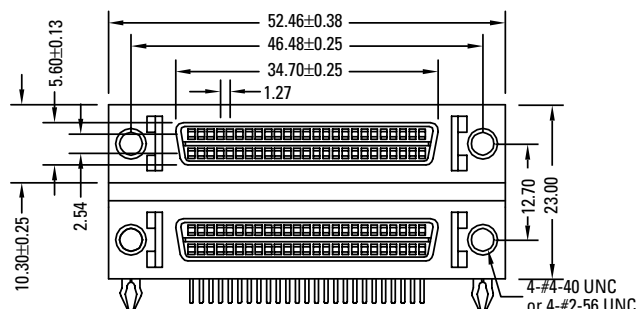
## K77 Series Dimensions

Dimensions in mm

### K77-50S/50S-DN, K77-50S/50S-DW



### K77-50S/50S-DNL, K77-50S/50S-DWL



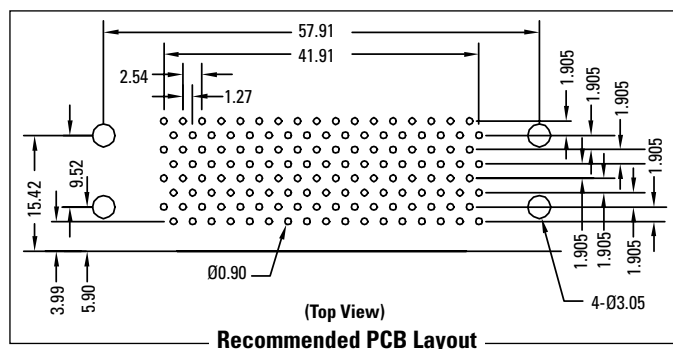
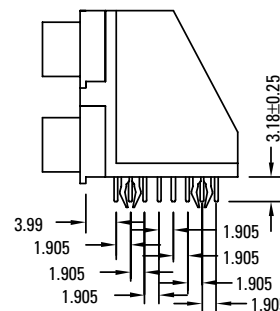
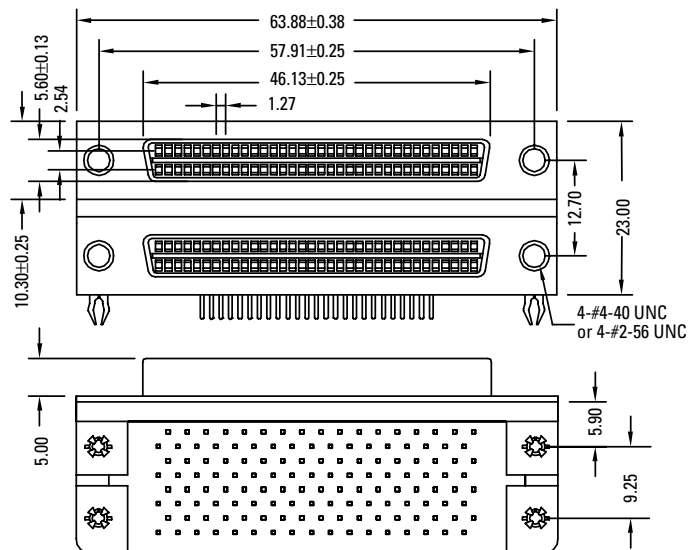
**SCSI**

*K77 Series*

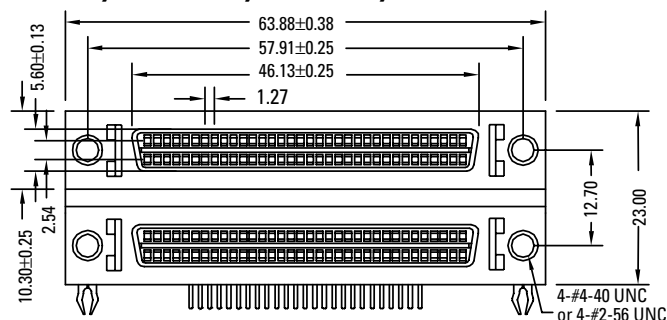
## K77 Series Dimensions

Dimensions in mm

### K77-68S/68S-DN, K77-68S/68S-DW



### K77-68S/68S-DNL, K77-68S/68S-DWL



**KYCON continues its leadership in connector design with a new line of Modular Jacks with Magnetics.**

**Features:**

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls, and Local Area Networks
- All stamped pins are Phosphor Bronze for superior contact retention
- Designs meet UL 1863 Sec. 8 Electrical Probe and Sec. 20 Child Finger Test requirements
- Mates with W.E. Co. and FCC 68 plugs
- Options available in standard Through Hole and Surface Mount designs
- Choice of standard or custom magnetic packages
- CSA/NRTL Certified File No. LR78160



# MODULAR JACKS WITH MAGNETICS

## Directory

### Through Hole

|                                                |           |
|------------------------------------------------|-----------|
| <b>GIS - Single</b>                            | <b>52</b> |
| <b>GSP - Combination RJ45 Over Stacked USB</b> | <b>55</b> |

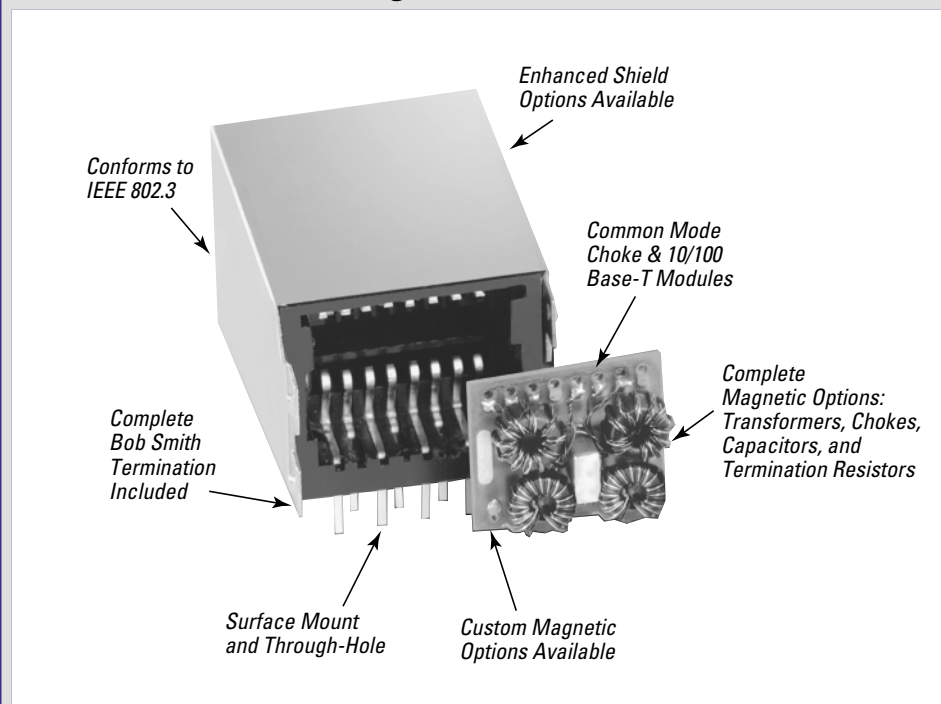


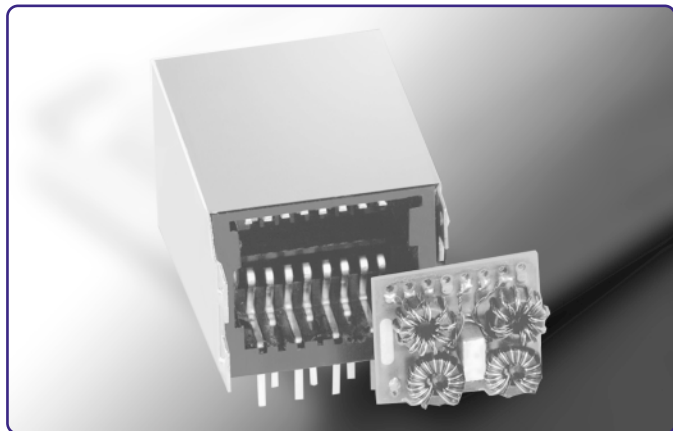
### Surface Mount

|                     |           |
|---------------------|-----------|
| <b>GMI - Single</b> | <b>57</b> |
|---------------------|-----------|



## Modular Jack with Magnetics Features:





## GIS Series Modular Jack With Integrated Magnetics

### Features



- Identical Form Factor as Standard Jacks
- Complete Magnetic Options: Transformers, Chokes, Capacitors, and Termination Resistors
- Common Mode Choke & 10/100 Base-T Modules
- Enhanced Shield Options Available
- Complete Bob Smith Termination Included
- Conforms to IEEE 802.3
- Custom Magnetic Options Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

Glass Filled, UL94V-0 Rated, Black Color

##### Shield

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze



## MODULAR JACKS WITH MAGNETICS

### GIS Series

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000 Volt RMS for 1 Minute

#### Contact Resistance

50 Milliohms Max

#### Current Rating

1.5 Amps

### Ordering Information

|        |   |              |               |                 |        |   |                  |
|--------|---|--------------|---------------|-----------------|--------|---|------------------|
| GIS    | - | 1            | 8             | 8               | S1     | - | 9025             |
| Series |   | No. of Ports | Size of Ports | No. of Contacts | Shield |   | Magnetic Package |

#### Series

GIS - Right Angle Integrated Modular Jack

#### Number of Ports

1

#### Size of Ports

8 - 8 Positions

#### Number of Contacts

8 - 8 Contacts

#### Single Shield Options

S1 - Fully Shielded, 3.05 Ground Pin Spacing

S9 - Fully Shielded, 3.05 Ground Pin Spacing, with Top and Side Ground Tabs

#### Magnetic Packages\*

10/100 Base-T Connector Modules

9001-9006 - 4 Core Module, Cable Side Module

9025-9030 - 5 Core Module, Cable Side Module

9075 - Common Mode Choke

\*Contact Factory for Other Available Magnetic Options

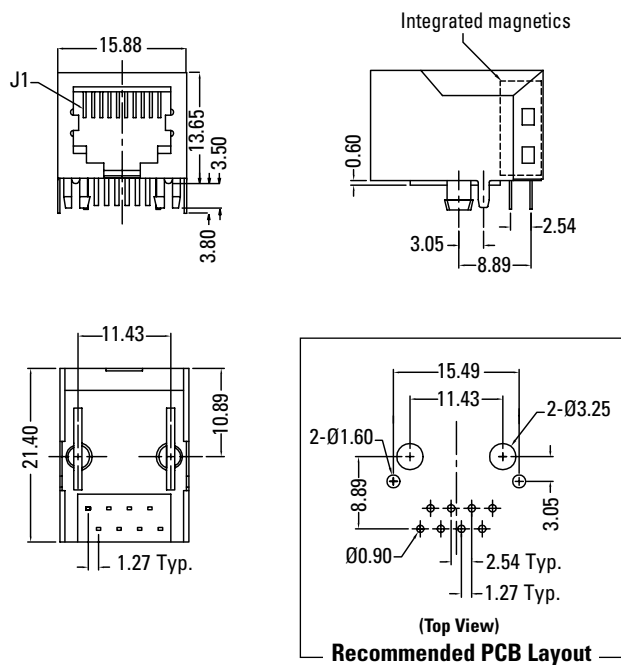
#### Plating Options

| Designator | Plating Description                                                                     |
|------------|-----------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact Area |

## GIS Series Dimensions

Dimensions in mm

### S1-Fully Shielded Single



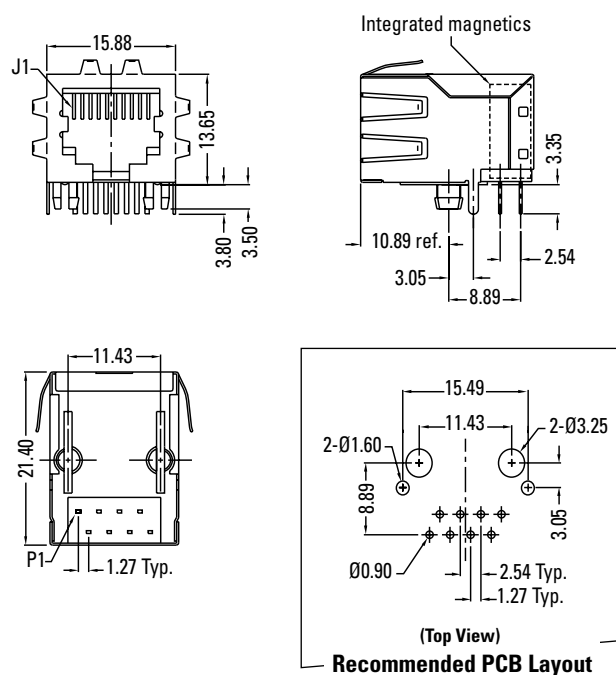
## MODULAR JACKS WITH MAGNETICS

### GIS Series

## GIS Series Dimensions

Dimensions in mm

### S9-Fully Shielded with Top and Side Grounding Tabs



## GIS Series Magnetic Package Options

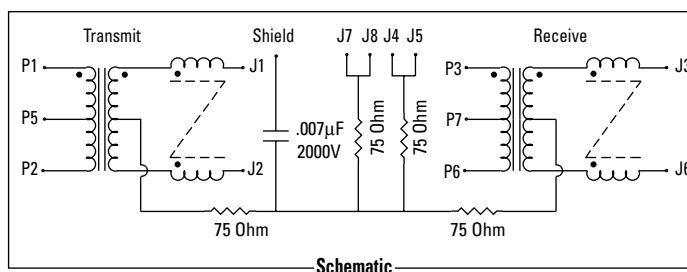
### 9001-9006 – 4 Core Module

OCL = 350  $\mu$ H minimum

Crosstalk = -35 dB minimum @ 1-100 MHz

| Electrical Parameters @ 25°C |                               |                             |            |                          |               |                   |            |
|------------------------------|-------------------------------|-----------------------------|------------|--------------------------|---------------|-------------------|------------|
| Magnetics Designator         | Turns Ratio*<br>( $\pm 5\%$ ) | Insertion Loss<br>(dB Max.) |            | Return Loss<br>(dB Min.) |               | CMRR<br>(dB Min.) |            |
|                              | Xmit/Rcv                      | 1-80<br>MHz                 | 100<br>MHz | 1-30<br>MHz              | 60-100<br>MHz | 1-100<br>MHz      | 200<br>MHz |
| 9001                         | 1:1 / 1:1                     | -1                          | -1.5       | -20                      | -15           | -30               | -20        |
| 9002                         | 1.25:1 / 1:1                  | -1                          | -2.0       | -20                      | -15           | -30               | -20        |
| 9003                         | 1.36:1 / 1:1                  | -1                          | -2.5       | -20                      | -12           | -30               | -15        |
| 9004                         | 1.41:1 / 1:1                  | -1                          | -2.5       | -20                      | -12           | -30               | -15        |
| 9005                         | 2:1 / 1:1                     | -1                          | -2.5       | -20                      | -10           | -30               | -10        |
| 9006                         | 1:1.41 / 1:1                  | -1                          | -2.5       | -20                      | -10           | -30               | -10        |

\*Turns Ratios are Chip Side: Cable Side / Chip Side: Cable Side



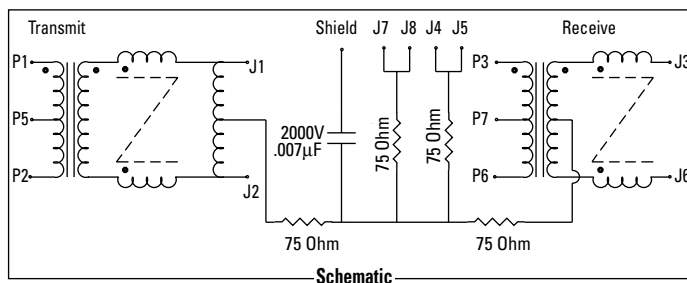
### 9025-9030 – 5 Core Module

OCL = 350  $\mu$ H minimum

Crosstalk = -35 dB minimum @ 1-100 MHz

| Electrical Parameters @ 25°C |                               |                             |            |                          |               |                   |            |
|------------------------------|-------------------------------|-----------------------------|------------|--------------------------|---------------|-------------------|------------|
| Magnetics Designator         | Turns Ratio*<br>( $\pm 5\%$ ) | Insertion Loss<br>(dB Max.) |            | Return Loss<br>(dB Min.) |               | CMRR<br>(dB Min.) |            |
|                              | Xmit/Rcv                      | 1-80<br>MHz                 | 100<br>MHz | 1-30<br>MHz              | 60-100<br>MHz | 1-100<br>MHz      | 200<br>MHz |
| 9025                         | 1:1 / 1:1                     | -1                          | -1.5       | -20                      | -15           | -30               | -20        |
| 9026                         | 1.25:1 / 1:1                  | -1                          | -2.0       | -20                      | -15           | -30               | -20        |
| 9027                         | 1.36:1 / 1:1                  | -1                          | -2.5       | -20                      | -12           | -30               | -15        |
| 9028                         | 1.41:1 / 1:1                  | -1                          | -2.5       | -20                      | -12           | -30               | -15        |
| 9029                         | 2:1 / 1:1                     | -1                          | -2.5       | -20                      | -10           | -30               | -10        |
| 9030                         | 1:1.41 / 1:1                  | -1                          | -2.5       | -20                      | -10           | -30               | -10        |

\*Turns Ratios are Chip Side: Cable Side / Chip Side: Cable Side



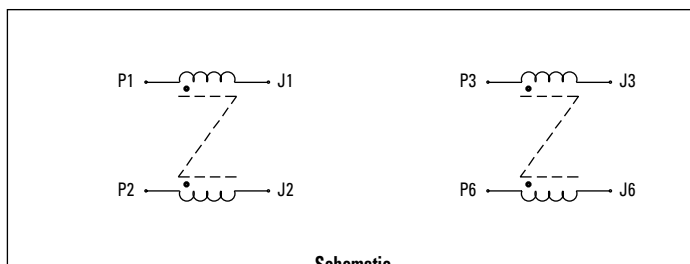
## MODULAR JACKS WITH MAGNETICS

### GIS Series

## GIS Series Magnetic Package Options

### 9075 – Common Mode Choke

| Electrical Parameters @ 25°C |                   |                                    |             |             |              |              |              |              |
|------------------------------|-------------------|------------------------------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Magnetics Designator         | DCR<br>(Ohm Max.) | Common Mode Rejection<br>(dB Min.) |             |             |              |              |              |              |
|                              |                   | @1-10<br>MHz                       | @ 80<br>MHz | @100<br>MHz | @ 200<br>MHz | @ 300<br>MHz | @ 400<br>MHz | @ 500<br>MHz |
| 9075                         | 1                 | -40                                | -40         | -30         | -20          | -20          | -10          | -10          |



Please Visit [www.kycon.com](http://www.kycon.com) or E-mail: [sales@kycon.com](mailto:sales@kycon.com) for Additional Magnetic Package Options



## GSP Series Combination RJ45 Over USB Sockets With Integrated Magnetics

### Features



- Licensed from Tyco
- Complete Bob Smith Termination Included
- 10/100 Base-T Modules
- Custom Magnetic Options Available
- Standard or Custom LED's in RJ45
- Conforms to IEEE 802.3
- CSA/NRTL Certified File No. 78160

### Performance Specifications

#### Materials and Finish - GSP



##### Body

PBT, Glass Filled UL94V-Rated, Black Color

##### Shield

Copper Alloy, Nickel Plated

##### Contact

Phosphor Bronze. Nickel Underplate on Entire Contact, Tin/Lead on Termination End, Gold Flash on Contact Area

#### Materials and Finish - USB



##### Body

PBT, Glass Filled UL94V-Rated. Color: Black

##### Shield

Copper Alloy, Nickel Plated

### Mechanical Specifications - USB

#### Insertion Force

3.6kg Max.

#### Extraction Force

1.0kg Min.

#### Durability Rating

1500 Mating Cycles Min.

## MODULAR JACKS WITH MAGNETICS

### GSP Series

### Electrical Characteristics - RJ45

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max.

#### Current Rating

1.5 Amps

#### Durability Rating

750 Mating Cycles Min.

### Electrical Characteristics - USB

#### Rated Voltage

30V AC

#### Contact Current Rating

1A Max.

#### Contact Resistance

30 Milliohms Max.

#### Insulation

1000 Megohms Min

#### Dielectric Withstanding Voltage

750V AC for 1 Minute

### Ordering Information

|        |   |       |   |        |   |                           |  |                          |   |                                     |
|--------|---|-------|---|--------|---|---------------------------|--|--------------------------|---|-------------------------------------|
| GSP    | — | B     | — | S2     | — | G                         |  | G                        | — | 9100                                |
| Series |   | Color |   | Shield |   | Plating<br>Option<br>RJ45 |  | Plating<br>Option<br>USB |   | Magnetic<br>Package &<br>LED Option |

#### Series

GSP – RJ45 w/ Integrated Magnetics  
over Stacked USB Socket

#### Color

B - Black

#### Shield Option

S2 - Fully Shielded with Tabs

#### Plating Options - RJ45

G - Gold Flash

#### Plating Options - USB

G - Gold Flash

#### Magnetic/LED Packages

9100 - 5 Core Module with Green, Amber and Yellow LEDs

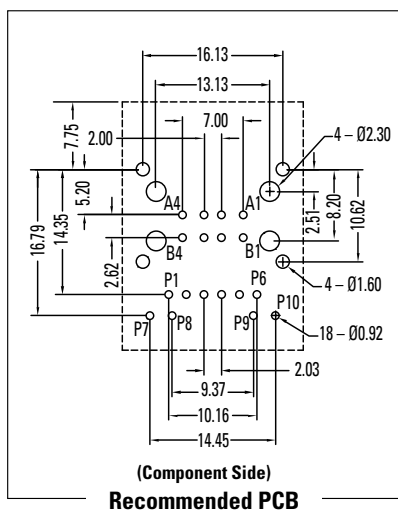
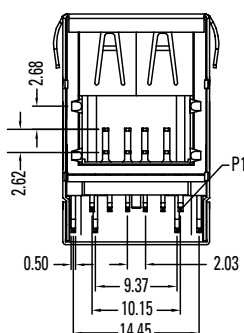
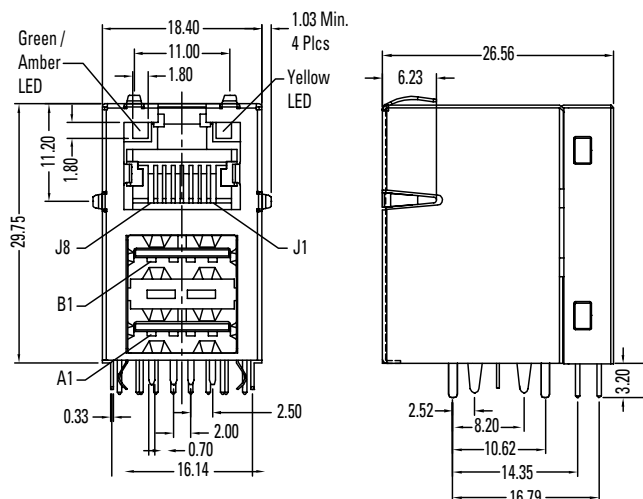
#### Plating Options

| Designator | Plating Description                                                                        |
|------------|--------------------------------------------------------------------------------------------|
| G          | Contacts are Plated with 0.0001 Nickel, Selective<br>Plating 0.000015 Gold on Contact Area |

## GSP Series Dimensions

Dimensions in mm

### GSP-B-S2-GG-9100



## MODULAR JACKS WITH MAGNETICS

### GSP Series

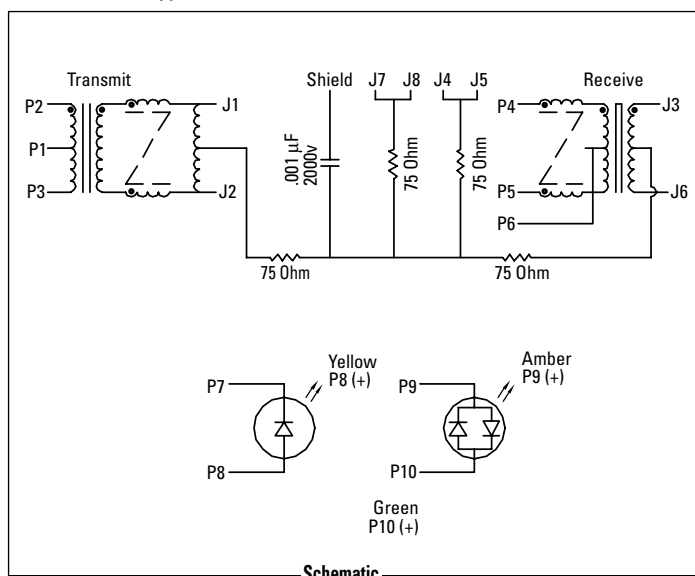
## GSP Series Magnetic LED Package Option

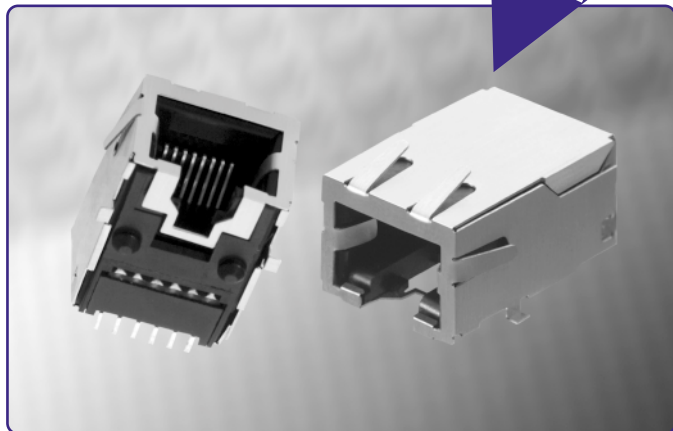
### 9100 – 5 Core Module

OCL = 350  $\mu$ H minimum @ 100KHz, 100m Vrms, 8mA DC Bias  
Crosstalk = -35 dB minimum @ 1-100 MHz

| Electrical Performance of 10/100 Base-T and Magnetic @ 25°C |                          |             |             |                   |                   |                              |
|-------------------------------------------------------------|--------------------------|-------------|-------------|-------------------|-------------------|------------------------------|
| Insertion Loss<br>(dB Max.)                                 | Return Loss<br>(dB Min.) |             |             | CMRR<br>(dB Min.) | CMD<br>(dB Min.)  | Turns Ratio<br>( $\pm 5\%$ ) |
| 1-100<br>MHz                                                | 1-30<br>MHz              | @ 60<br>MHz | @ 80<br>MHz | 100KHz-<br>100MHz | 100KHz-<br>100MHz |                              |
| -1                                                          | -20                      | -18         | -12         | -30               | -30               | Xmit/Rcv<br>1CT:1/1CT:1      |

Isolation: 1500 Vrms  
LEDs: Vf=2.1V Typ. @ 20mA





## GMI Series SMT Modular Jack With Integrated Magnetics

### Features



- Surface Mount Design
- Complete Magnetic Options: Transformers, Chokes, Capacitors, and Termination Resistors
- Fully Shielded with Ground Tabs
- Complete Bob Smith Termination Included
- Conforms to IEEE 802.3
- 8 Mating Contacts, 6 SMT PCB Leads
- CSA/NRTL Certified File No. LR87160

### Performance Specifications

#### Materials and Finish

##### Housing Material

High Temperature Thermoplastic, UL94V-0 Rated, Black Color

##### Shield

Copper Alloy, Tin Plated

##### Contact Material

Phosphor Bronze

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

50 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS WITH MAGNETICS

### GMI Series

### Ordering Information

|        |   |               |               |                |   |                  |                 |
|--------|---|---------------|---------------|----------------|---|------------------|-----------------|
| GMI    | - | S2            | 8             | 8              | - | -                | -               |
| Series |   | Shield Option | Size of Ports | No of Contacts |   | Magnetic Package | Plating Options |

#### Series

GMI - SMT Integrated Modular Jack

#### Shield Option

S2- Fully Shielded, 3.05 Ground Pin Spacing, with Ground Tabs

#### Number of Positions

8 - 8 Opening

#### Number of Contacts

8 - 8 Contacts

#### Magnetic Packages\*

10/100 Base-T Connector Module

9125F2- 5 Core Module, Cable Side Choke

9126F2- 4 Core Module, Cable Side Choke

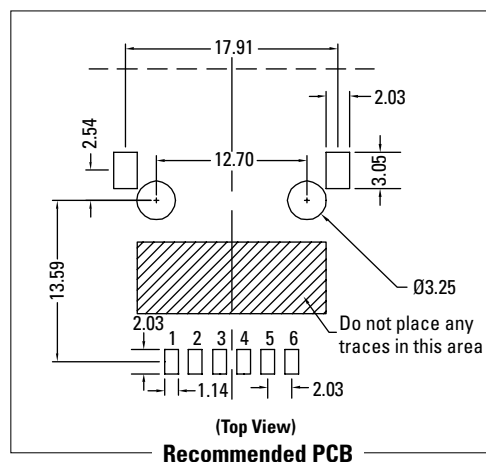
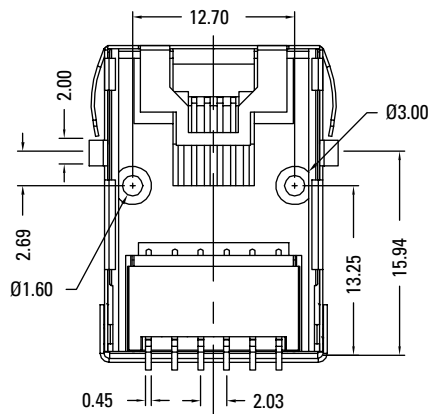
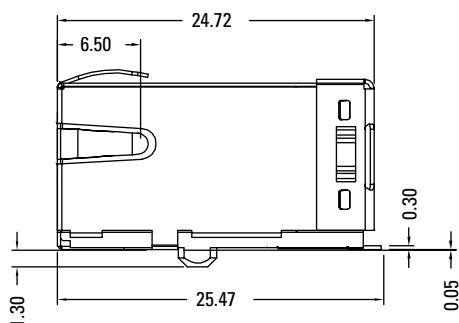
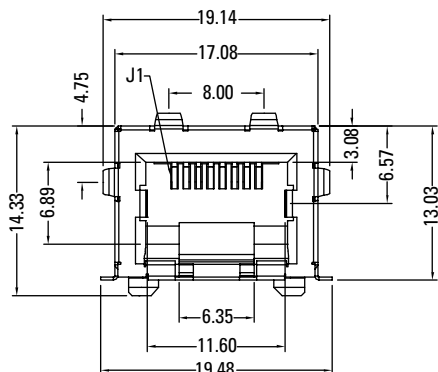
#### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact Area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

\*Contact Factory for Other Available Magnetic Options

## GMI Series Dimensions

Dimensions in mm



## MODULAR JACKS WITH MAGNETICS

### GMI Series

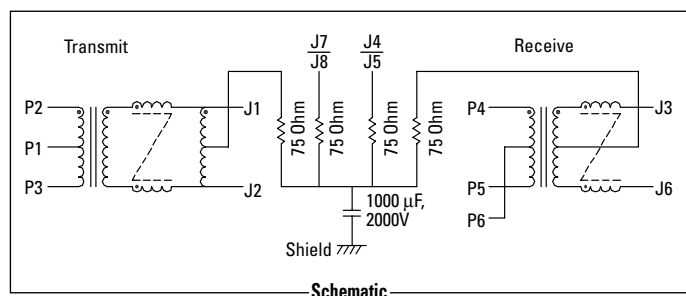
## GMI Series Magnetic Package Options

### GMI-S288-9125F2- 5 Core Module

OCL = 350  $\mu$ H minimum @ 100KHz, 100m Vrms, 8mA DC Bias  
Crosstalk = -35 dB minimum @ 100KHz-100 MHz

Electrical Parameters @ 25°C

| Turns Ratio<br>( $\pm 5\%$ ) | Insertion Loss<br>(dB Max.) |            | Return Loss<br>(dB Min.) |             |             | CMRR<br>(dB Min.) | CMD<br>(dB Min.)  |
|------------------------------|-----------------------------|------------|--------------------------|-------------|-------------|-------------------|-------------------|
| Xmit/Rcv                     | 1-80<br>MHz                 | 100<br>MHz | 1-30<br>MHz              | @ 60<br>MHz | @ 80<br>MHz | 100KHz-<br>100MHz | 100KHz-<br>100MHz |
| 1CT:1/1CT:1CT                | -1.0                        | -1.5       | -20                      | -15         | -12         | -30               | -30               |

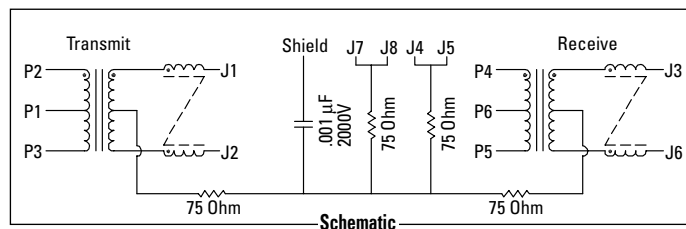


### GMI-S288-9126F2- 4 Core Module

OCL = 350  $\mu$ H minimum @ 100KHz, 100m Vrms, 8mA DC Bias  
Crosstalk = -35 dB minimum @ 100KHz-100 MHz

Electrical Parameters @ 25°C

| Turns Ratio<br>( $\pm 5\%$ ) | Insertion Loss<br>(dB Max.) |            | Return Loss<br>(dB Min.) |             |             | CMRR<br>(dB Min.) | CMD<br>(dB Min.)  |
|------------------------------|-----------------------------|------------|--------------------------|-------------|-------------|-------------------|-------------------|
| Xmit/Rcv                     | 1-80<br>MHz                 | 100<br>MHz | 1-30<br>MHz              | @ 60<br>MHz | @ 80<br>MHz | 100KHz-<br>100MHz | 100KHz-<br>100MHz |
| 1.25CT:1/1CT:1CT             | -1.0                        | -1.5       | -20                      | -15         | -12         | -30               | -30               |



**KYCON continues its leadership in Modular Jacks and Plugs by offering a complete line of sizes and options.**

### Features:

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls, and Local Area Networks
- All stamped pins are Phosphor Bronze for superior contact retention
- Designs meet UL 1863 Sec. 8 Electrical Probe and Sec. 20 Child Finger Test requirements
- Mates with W.E. Co. and FCC 68 plugs
- Conforms to FCC requirements under No. 47 C.F.R. Part 68 Subpart F with 50 micro inch Gold plating on pins
- Options available in standard Through Hole and Surface Mount designs
- Options available partially and fully shielded for EMI/RFI protection and Category 5 applications
- UL recognized File No. E134345
- CSA/NRTL Certified File No. LR78160



KYCON Tech Support: **1-888-KYCON-22**  
 or E-mail: [sales@kycon.com](mailto:sales@kycon.com)

## MODULAR JACKS AND PLUGS

### Directory

#### Right Angle Modular Jacks

|                                    |           |
|------------------------------------|-----------|
| <b>GM - .450" Height</b>           | <b>60</b> |
| <b>GM - SMT2 - .450" Height</b>    | <b>62</b> |
| <b>GS - .515" Height</b>           | <b>66</b> |
| <b>GDL - .492" Height</b>          | <b>68</b> |
| <b>GDLF - .520" Height/Ferrite</b> | <b>70</b> |
| <b>GL - .570" Height</b>           | <b>72</b> |
| <b>GDA - .595" Height</b>          | <b>73</b> |



#### Perpendicular

|                        |           |
|------------------------|-----------|
| <b>GDP - Top Entry</b> | <b>74</b> |
|------------------------|-----------|



#### Ganged Jacks

|                                         |           |
|-----------------------------------------|-----------|
| <b>GSG - .515" Height, Right Angle</b>  | <b>76</b> |
| <b>GA - .606" Height, Right Angle</b>   | <b>79</b> |
| <b>GP - .630" Height, Perpendicular</b> | <b>79</b> |



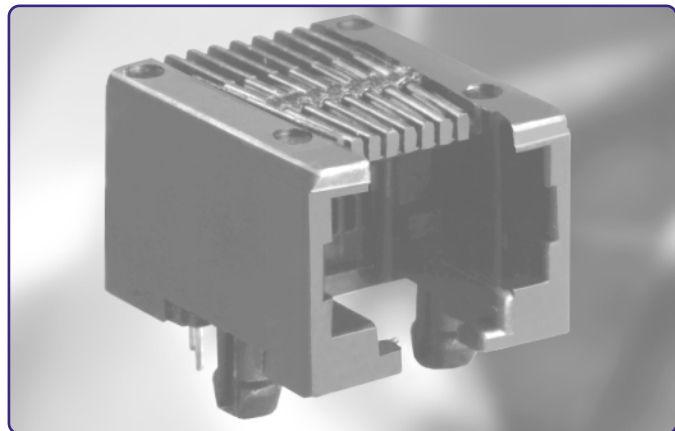
#### Modular Plugs

|                                           |           |
|-------------------------------------------|-----------|
| <b>MP/MPS - Non-Shielded and Shielded</b> | <b>82</b> |
|-------------------------------------------|-----------|



### Modular Jack Options:

| Series                | GM | GM-SMT2 | GS | GDL | GDLF | GL | GDA | GDP | GSG | GA | GP |
|-----------------------|----|---------|----|-----|------|----|-----|-----|-----|----|----|
| Standard Through Hole | •  |         | •  | •   | •    | •  | •   | •   | •   | •  | •  |
| SMT                   |    | •       |    | •   |      |    |     |     |     |    |    |
| Shielded              | •  | •       | •  | •   | •    |    |     | •   | •   |    |    |
| Keyed                 | •  |         |    | •   |      |    | •   | •   |     |    |    |
| Panel Stops           |    |         |    | •   | •    | •  | •   | •   |     | •  | •  |
| Category 5            |    |         | •  |     |      |    |     |     | •   |    |    |
| 4P4C                  | •  | •       |    |     |      | •  | •   | •   |     |    |    |
| 6P4C                  | •  | •       |    | •   | •    | •  | •   | •   |     | •  | •  |
| 6P6C                  | •  | •       |    | •   | •    | •  | •   | •   |     | •  | •  |
| 8P8C                  | •  | •       | •  | •   | •    | •  | •   | •   | •   | •  | •  |
| 10P10C                | •  | •       |    |     |      | •  |     |     |     |    |    |
| Perpendicular         |    |         |    |     |      |    |     | •   |     |    | •  |
| Ferrite               |    |         |    |     | •    |    |     |     |     |    |    |



## GM Series Right Angle Modular Jack

### Features



- 0.45" Height
- Low Profile Design Suitable for PC Add-On Board Applications
- Snap in Board Retention Tabs
- Available in 4, 6, 8, and 10 Position Housings
- Available Fully Shielded for EMI/RFI Protection
- CSA/NRTL Certified File No. LR78160

## Performance Specifications

### Materials and Finish

#### Housing Material

PBT Thermoplastic, UL94V-0 Rated, Black Color

#### Shield Material

Copper Alloy, Nickel Plated

#### Contact Material

Phosphor Bronze

## Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GM Series

## Ordering Information

|        |   |      |   |               |                    |                 |
|--------|---|------|---|---------------|--------------------|-----------------|
| GM     | — | N    | — | 8             | 8                  | —               |
| Series |   | Type |   | Size of Ports | Number of Contacts | Plating Options |

### Series

GM - Right Angle, PCB Mount

### Type

N - Non-Shielded

S - Fully Shielded

### Size of Ports

4 - 4 Positions (Not Available Shielded)

6 - 6 Positions

8 - 8 Positions

10 - 10 Positions

### Number of Contacts

4 - 4 Contacts

6 - 6 Contacts

8 - 8 Contacts

10 - 10 Contacts

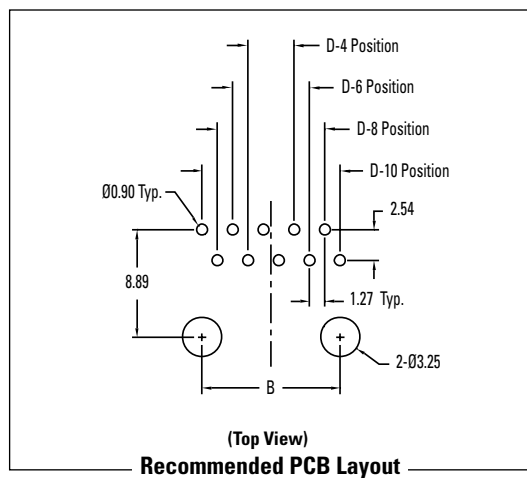
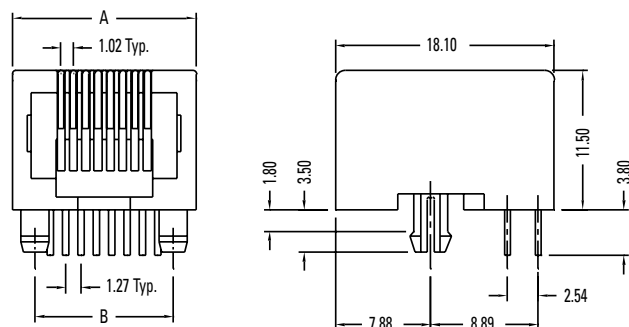
### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

## GM Series Dimensions

Dimensions in mm

### GM-N (Non-Shielded)



| Part Number | Dimensions |       |   |       |
|-------------|------------|-------|---|-------|
|             | A          | B     | C | D     |
| GM-N-44     | 11.18      | 7.62  | - | 3.81  |
| GM-N-64     | 13.20      | 10.16 | - | 3.81  |
| GM-N-66     | 13.20      | 10.16 | - | 6.35  |
| GM-N-88     | 15.24      | 11.43 | - | 8.89  |
| GM-N-1010   | 15.24      | 11.43 | - | 11.43 |

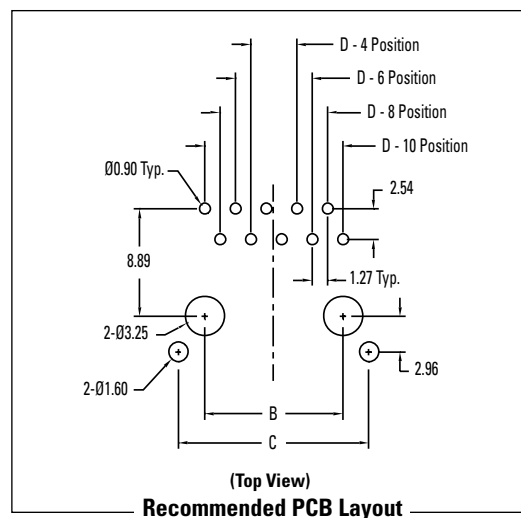
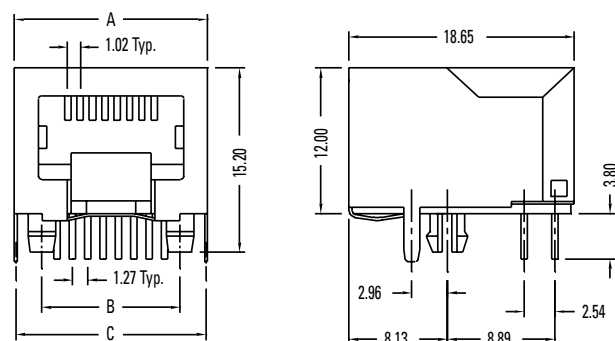
## MODULAR JACKS AND PLUGS

### GM Series

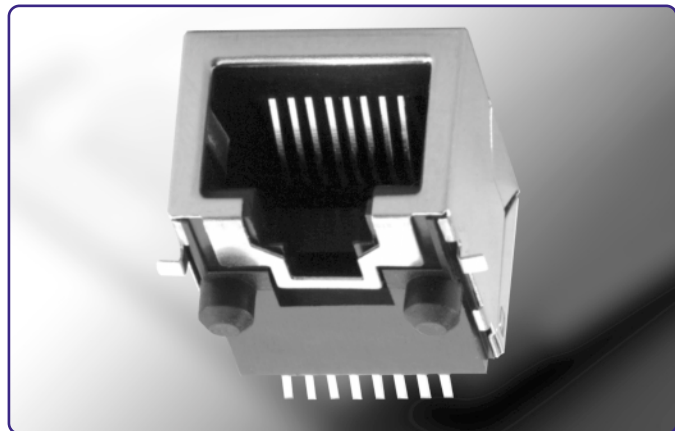
## GM Series Dimensions

Dimensions in mm

### GM-S (Shielded)



| Part Number | Dimensions |       |       |       |
|-------------|------------|-------|-------|-------|
|             | A          | B     | C     | D     |
| GM-S-64     | 13.70      | 10.16 | 13.50 | 3.81  |
| GM-S-66     | 13.70      | 10.16 | 13.50 | 6.35  |
| GM-S-88     | 16.00      | 11.43 | 15.76 | 8.89  |
| GM-S-1010   | 16.00      | 11.43 | 15.76 | 11.43 |



## GM-SMT2 Series Surface Mount Modular Jack

### Features



- 0.45" Height
- Low Profile Design Suitable for PC Add-On Board Applications
- Available in 4, 6, 8, and 10 Position Housings
- Available Fully Shielded for EMI/RFI Protection
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

High Temperature Thermoplastic, Reflow Compatible, UL94V-0 Rated, Black Color

##### Shield Material

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GM-SMT2 Series

### Ordering Information

|         |   |      |   |               |   |                    |   |                 |                 |
|---------|---|------|---|---------------|---|--------------------|---|-----------------|-----------------|
| GM-SMT2 | - | N    | - | 8             | - | 8                  | - | -               |                 |
| Series  |   | Type |   | Size of Ports |   | Number of Contacts |   | Plating Options | Package Options |

#### Series

GM-SMT2 - Surface Mount Right Angle Modular Jack

#### Type

- N - Non-Shielded with Locking Posts
- S - Fully Shielded with Locking Posts
- S2 - Fully Shielded with Non-Locking Posts
- S6 - Fully Shielded with Top and Side Grounding Tabs, with Non-Locking Posts
- S7 - Fully Shielded with Top and Side Grounding Tabs, with Locking Posts

#### Size of Ports

- 4 - 4 Positions
- 6 - 6 Positions
- 8 - 8 Positions
- 10 - 10 Positions

#### Number of Contacts

- 4 - 4 Contacts
- 6 - 6 Contacts
- 8 - 8 Contacts
- 10 - 10 Contacts

#### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

#### Package Options

- Blank - Bulk
- TR - Tape & Reel

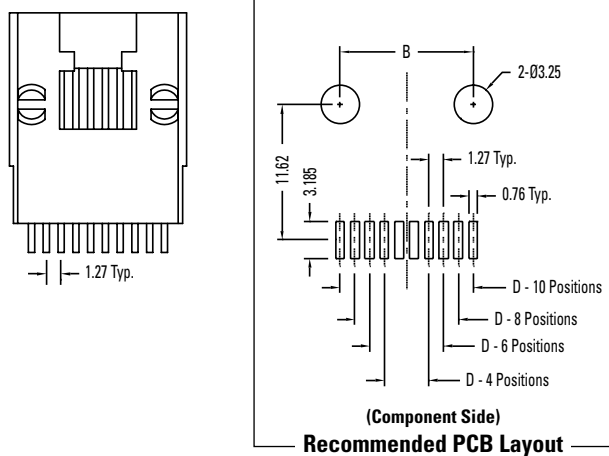
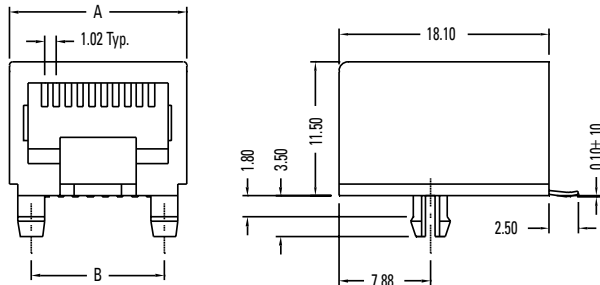
#### Available Options

| Type         | Position / Contacts |    |    |    |      |
|--------------|---------------------|----|----|----|------|
|              | 44                  | 64 | 66 | 88 | 1010 |
| N Non-Shield | •                   | •  | •  | •  | •    |
| S Shield     |                     | •  | •  | •  | •    |
| S2 Shield    |                     |    |    | •  | •    |
| S6 Shield    |                     |    |    | •  |      |
| S7 Shield    |                     |    |    | •  |      |
| T&R          |                     |    |    | •  | •    |

## GM-SMT2 Series Dimensions

Dimensions in mm

### GM-SMT2-N



| Part Number    | Dimensions |       |   |       |
|----------------|------------|-------|---|-------|
|                | A          | B     | C | D     |
| GM-SMT2-N-44   | 11.21      | 7.62  | - | 3.81  |
| GM-SMT2-N-64   | 12.96      | 10.16 | - | 3.81  |
| GM-SMT2-N-66   | 12.96      | 10.16 | - | 6.35  |
| GM-SMT2-N-88   | 15.03      | 11.43 | - | 8.89  |
| GM-SMT2-N-1010 | 15.03      | 11.43 |   | 11.43 |

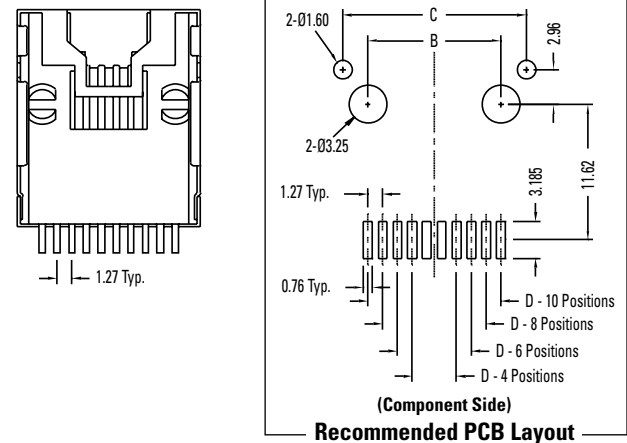
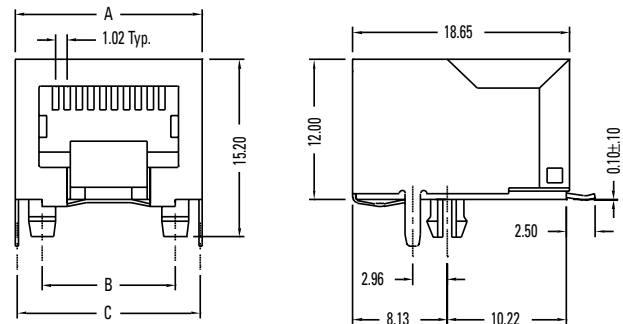
## MODULAR JACKS AND PLUGS

### GM-SMT2 Series

## GM-SMT2 Series Dimensions

Dimensions in mm

### GM-SMT2-S

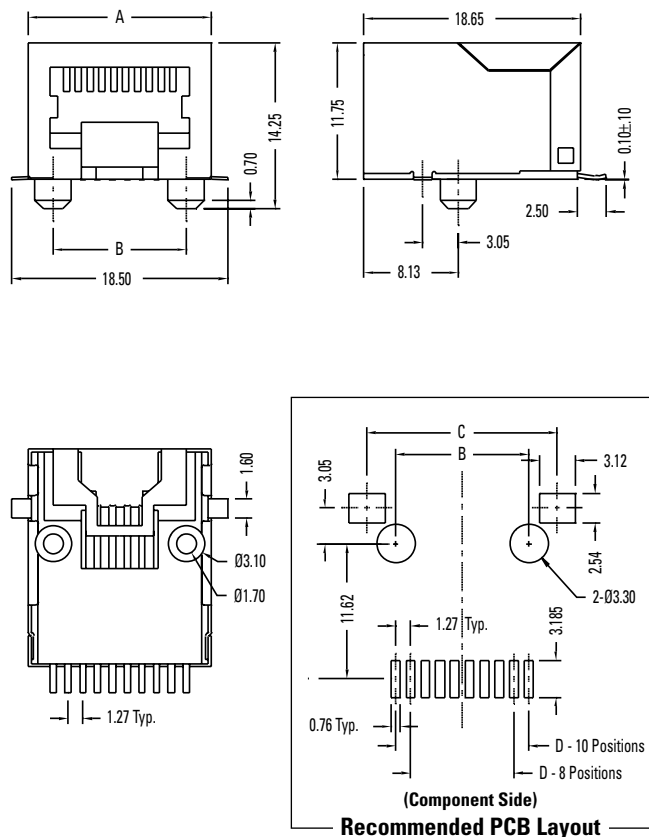


| Part Number    | Dimensions |       |       |       |
|----------------|------------|-------|-------|-------|
|                | A          | B     | C     | D     |
| GM-SMT2-S-64   | 13.70      | 10.16 | 13.50 | 3.81  |
| GM-SMT2-S-66   | 13.70      | 10.16 | 13.50 | 6.35  |
| GM-SMT2-S-88   | 15.74      | 11.43 | 15.54 | 8.89  |
| GM-SMT2-S-1010 | 15.74      | 11.43 | 15.54 | 11.43 |

## GM-SMT2 Series Dimensions

Dimensions in mm

### GM-SMT2-S2



| Part Number     | Dimensions |       |       |       |
|-----------------|------------|-------|-------|-------|
|                 | A          | B     | C     | D     |
| GM-SMT2-S2-88   | 15.74      | 11.43 | 16.35 | 8.89  |
| GM-SMT2-S2-1010 | 15.74      | 11.43 | 16.35 | 11.43 |

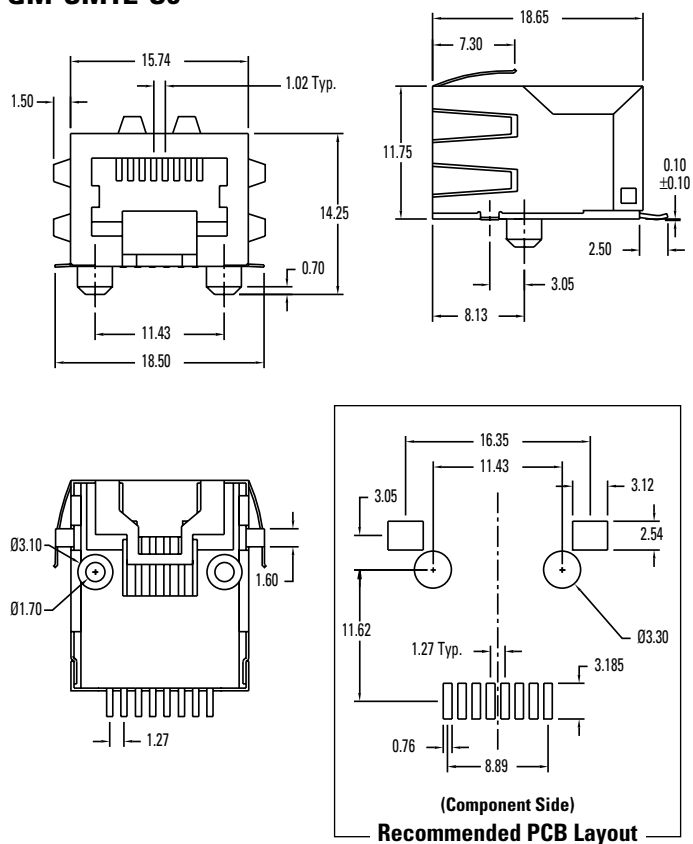
## MODULAR JACKS AND PLUGS

### GM-SMT2 Series

## GM-SMT2 Series Dimensions

Dimensions in mm

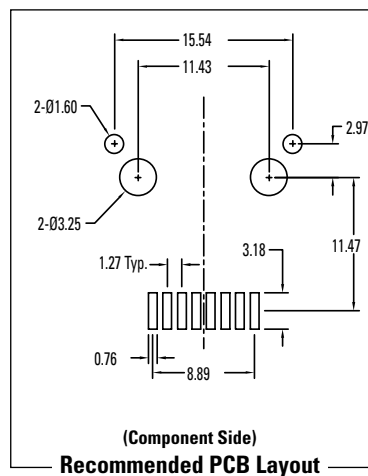
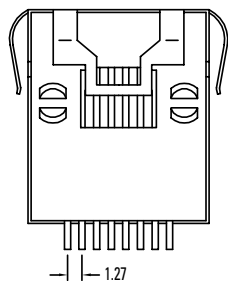
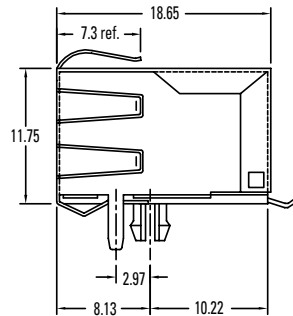
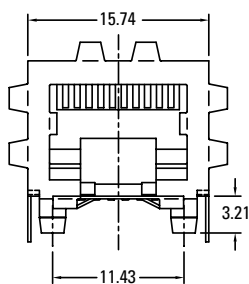
### GM-SMT2-S6

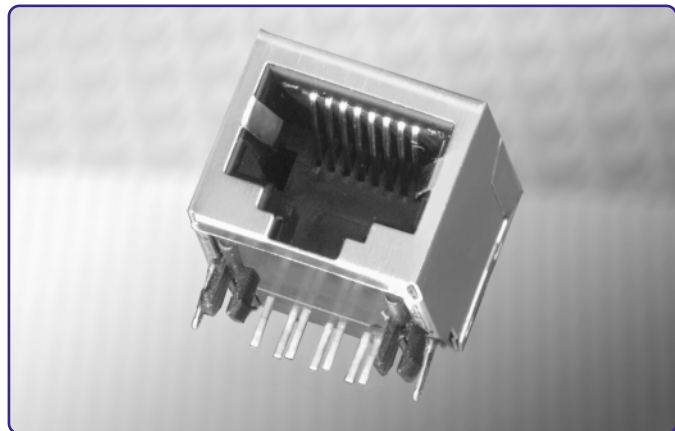


## GM-SMT2 Series Dimensions

Dimensions in mm

### GM-SMT2-S7





## GS Series Right Angle Modular Jack

### Features



- 0.515" Height
- Snap in Board Retention Tabs
- Available with Ground Tabs
- Available Fully Shielded for Category 5 Applications
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

PBT Thermoplastic, Glass Filled, UL94V-0 Rated, Black Color

##### Shield

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GS Series

### Electrical Performance

Category 5 100MHz bandwidth performance.

Attenuation @ 100MHz less than 0.13dB.

Performance meets Near End Crosstalk (NEXT)

requirements of -40dB @ 100MHz per EIA/TIA 568A

in applications where UL approved Category 5 cable

(GA27-3773-1) is used.

Shielded types offer 20dB shielding from 30MHz to 300MHz

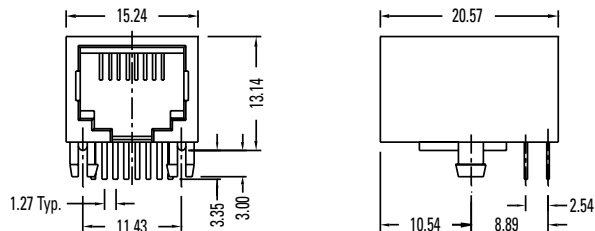
### Ordering Information

| GS                                                                                                        | —                                                                                                                                                             | NS            | — | 8             | — | 8                  | — | 3.05               | —               |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---------------|---|--------------------|---|--------------------|-----------------|
| Series                                                                                                    |                                                                                                                                                               | Shield Option |   | Size of Ports |   | Number of Contacts |   | Ground Pin Spacing | Plating Options |
| <b>Series</b><br>GS - Right Angle Modular Jack PCB Mount                                                  |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| <b>Shield Options</b><br>N - Non-Shielded<br>NS - Fully Shielded<br>NS2 - Fully Shielded with Ground Tabs |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| <b>Size of Ports</b><br>8 - 8 Positions                                                                   |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| <b>Number of Contacts</b><br>8 - 8 Contacts                                                               |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| <b>Ground Pin Spacing (Shielded Only)</b><br>3.05 - 3.05mm<br>3.68 - 3.68mm<br>4.57 - 4.57mm              |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| <b>Plating Options</b>                                                                                    |                                                                                                                                                               |               |   |               |   |                    |   |                    |                 |
| Designator                                                                                                | Plating Description                                                                                                                                           |               |   |               |   |                    |   |                    |                 |
| Standard                                                                                                  | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |               |   |               |   |                    |   |                    |                 |
| 50                                                                                                        | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |               |   |               |   |                    |   |                    |                 |

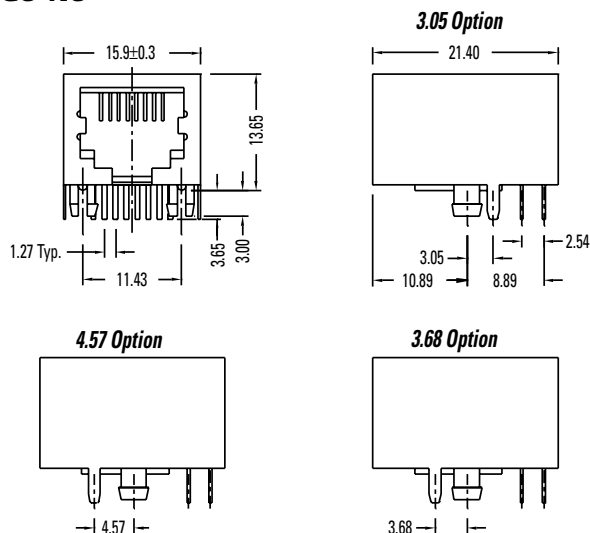
## GS Series Dimensions

Dimensions in mm

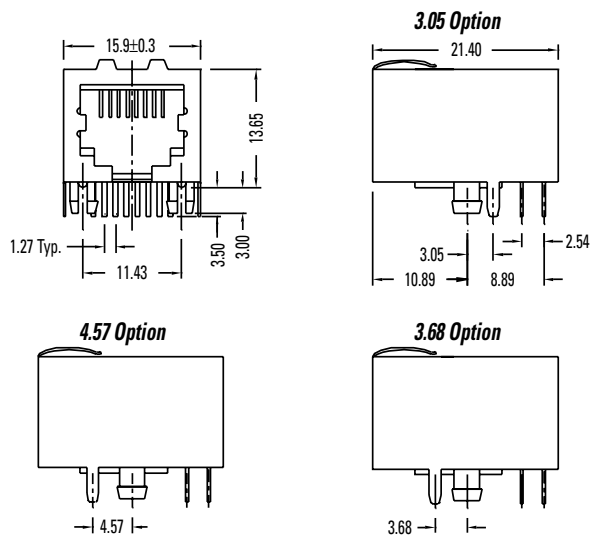
### GS-N



### GS-NS



### GS-NS2



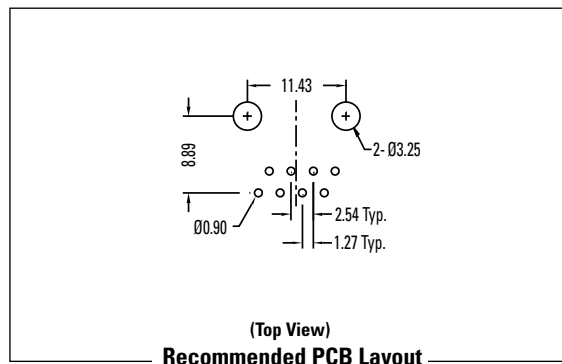
## MODULAR JACKS AND PLUGS

### GS Series

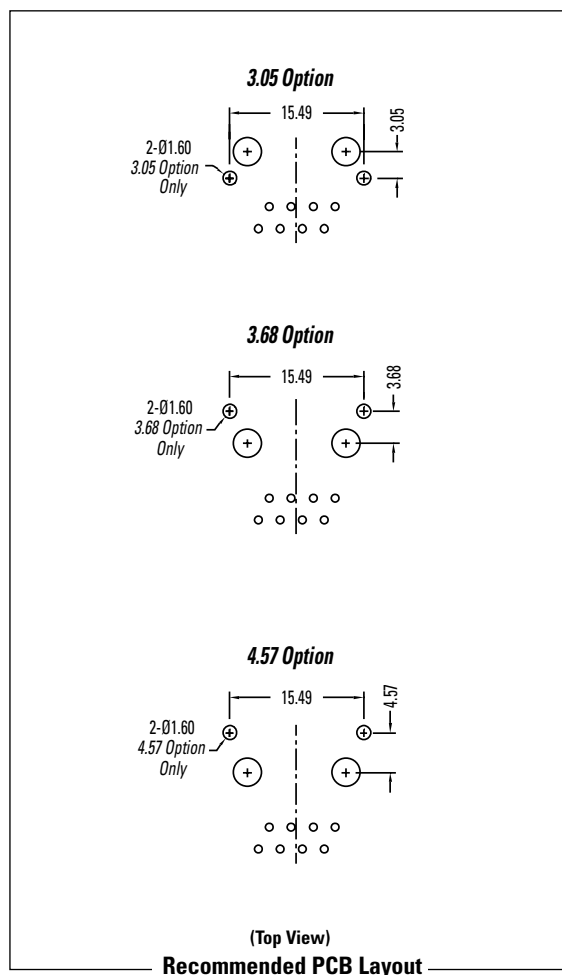
## GS Series Dimensions

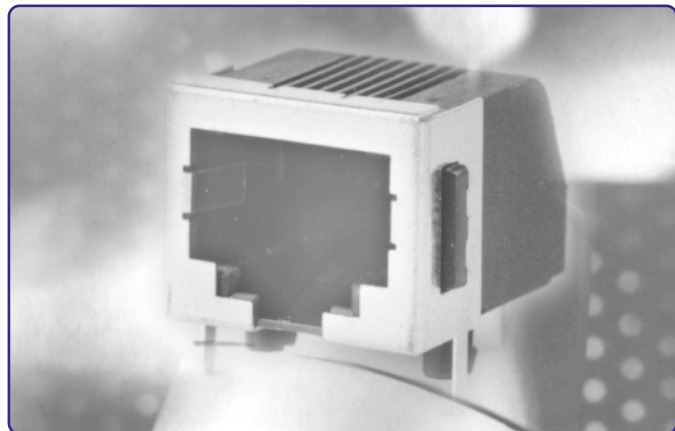
Dimensions in mm

### GS-N



### GS-NS, GS-NS2





## GDL Series Right Angle Modular Jack

### Features



- 0.492" Height
- Available in SMT and Reflow Compatible Through Hole Designs
- Panel Stops, Shielding and Keying Options Available
- Snap-In Board Retention Tabs
- Available in 6 and 8 Position Housings
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

GDL - PBT Thermoplastic, Glass Filled, UL94V-0 Rated, Black Color

GDLHT, GDL-SMT - High Temperature Thermoplastic, Reflow Compatible UL94V-0 Rated, Black Color

##### Shield Material

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GDL Series

### Ordering Information

|        |   |      |   |               |                    |                 |
|--------|---|------|---|---------------|--------------------|-----------------|
| GDL    | - | A    | - | 6             | 6                  | -               |
| Series |   | Type |   | Size of Ports | Number of Contacts | Keying Option   |
|        |   |      |   |               |                    | Plating Options |

#### Series

GDL - Right Angle Modular Jack PCB Mount

GDLHT - Reflow Compatible Version

GDL-SMT - Surface Mount Version

#### Type

A - With Panel Stops, Non-Shielded

N - Without Panel Stops, Non-Shielded

S - With Panel Stops, Shielded

#### Size of Ports

6 - 6 Positions

8 - 8 Positions

#### Number of Contacts

4 - 4 Contacts

6 - 6 Contacts

8 - 8 Contacts

#### Keying Option

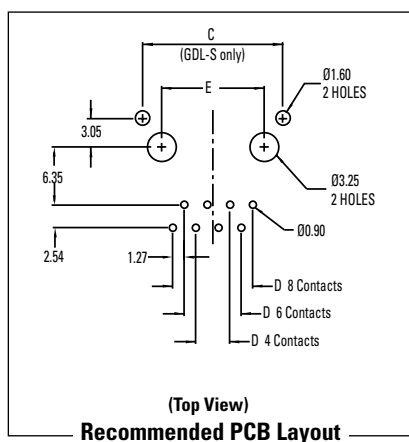
Blank - Standard

K - Keyed (8 Positions Only)

#### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

Dimensions in mm

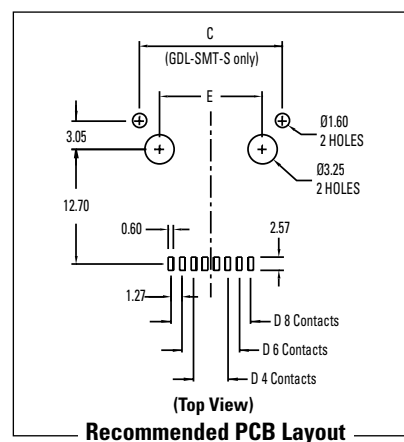


| Part Number          | A     | B     | C     | D    | E     |
|----------------------|-------|-------|-------|------|-------|
| GDL-A-64, GDLHT-A-64 | 13.21 | 15.75 | —     | 3.81 | 10.16 |
| GDL-A-66, GDLHT-A-66 | 13.21 | 15.75 | —     | 6.35 | 10.16 |
| GDL-A-88, GDLHT-A-88 | 15.24 | 17.78 | —     | 8.89 | 11.43 |
| GDL-A-88K            | 15.24 | 17.78 | —     | 8.89 | 11.43 |
| GDL-N-64, GDLHT-N-64 | 13.21 | —     | —     | 3.81 | 10.16 |
| GDL-N-66, GDLHT-N-66 | 13.21 | —     | —     | 6.35 | 10.16 |
| GDL-N-88, GDLHT-N-88 | 15.24 | —     | —     | 8.89 | 11.43 |
| GDL-N-88K            | 15.24 | —     | —     | 8.89 | 11.43 |
| GDL-S-64, GDLHT-S-64 | 13.84 | 15.75 | 13.72 | 3.81 | 10.16 |
| GDL-S-66, GDLHT-S-66 | 13.84 | 15.75 | 13.72 | 6.35 | 10.16 |
| GDL-S-88, GDLHT-S-88 | 15.88 | 17.78 | 15.75 | 8.89 | 11.43 |
| GDL-S-88K            | 15.88 | 17.78 | 15.75 | 8.89 | 11.43 |

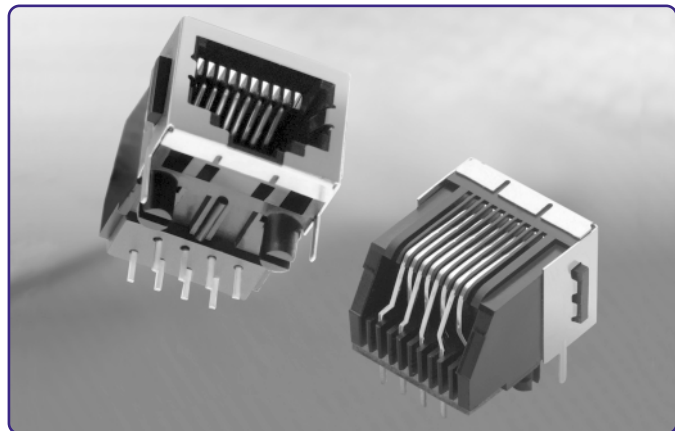
*GDL Series*

Dimensions in mm

Figure 1 consists of two technical drawings of a test cell. Drawing (a) is a side view showing the profile of the cell with the following dimensions: a total width of 18.34, a top flange width of 2.67, a vertical distance of 0.75 from the top flange to the start of the main body, a main body height of 13.19, a base thickness of 3.18, a bottom flange width of 3.05, a small gap of 0.50, and a small protrusion of 0.25. Drawing (b) is a top view showing the internal structure with labels for 'Shield' and 'Panel Stop'. Dimensions include B (total width), A (width of the central component area), E (width of the base), and C (width of the bottom flange).



| Part Number  | A     | B     | C     | D    | E     |
|--------------|-------|-------|-------|------|-------|
| GDL-SMT-A-64 | 13.21 | 15.75 | —     | 3.81 | 10.16 |
| GDL-SMT-A-66 | 13.21 | 15.75 | —     | 6.35 | 10.16 |
| GDL-SMT-A-88 | 15.24 | 17.78 | —     | 8.89 | 11.43 |
| GDL-SMT-N-64 | 13.21 | —     | —     | 3.81 | 10.16 |
| GDL-SMT-N-66 | 13.21 | —     | —     | 6.35 | 10.16 |
| GDL-SMT-N-88 | 15.24 | —     | —     | 8.89 | 11.43 |
| GDL-SMT-S-88 | 15.88 | 17.78 | 15.75 | 8.89 | 11.43 |



## GDLF Series Right Angle Modular Jack with Ferrite

### Features

- 0.520" Height
- Shielding Options Available
- Ferrite Block for High Frequency Noise Filtering
- Grounding Flaps Available
- Snap-In Retention Tabs
- Gold Plated Contacts
- CSA/NRTL Certified File No. LR78160



### Performance Specifications

#### Materials and Finish



##### Housing Material

PBT Thermoplastic, UL94V-0, Black Color

##### Shield Material

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze

##### Contact Plating

Standard - 50u" Gold over Nickel on Contacts  
Selective Gold Plating on Contact Area.

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GDLF Series

### Ordering Information

|        |   |                |   |                     |   |                    |   |                 |
|--------|---|----------------|---|---------------------|---|--------------------|---|-----------------|
| GDLF   | - | S              | - | 8                   | - | 8                  | - | 50              |
| Series |   | Shield Options |   | Number of Positions |   | Number of Contacts |   | Plating Options |

#### Series

GDLF - Right Angle Modular Jack with Ferrite

#### Shield Options

- S - Short Shield with Flat Grounding Flaps
- S3 - Extended Shield with Flat Grounding Flaps
- SA - Short Shield with 20° Angled Grounding Flaps
- S3A - Extended Shield with 20° Angled Grounding Flaps

#### Number of Positions

- 6 - 6 Opening (Only Available with Shield Option "S")
- 8 - 8 Opening

#### Number of Contacts

- 4 - 4 Contacts
- 6 - 6 Contacts
- 8 - 8 Contacts

#### Plating

50 - 50u" Gold Plating

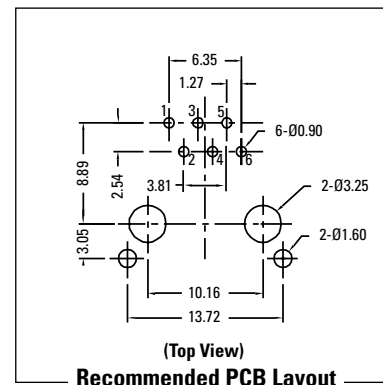
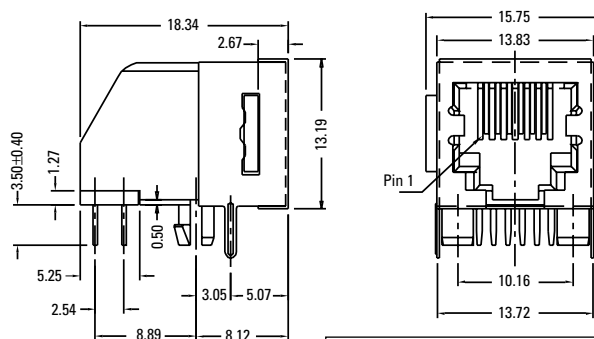
### Ferrite Specifications

| Test Freq. | Impedance | Test Freq. | Impedance |
|------------|-----------|------------|-----------|
| 1 Mhz      | 1 ohm     | 50 Mhz     | 16 ohms   |
| 10 Mhz     | 7 ohms    | 100Mhz     | 21 ohms   |
| 30 Mhz     | 13 ohms   |            |           |

### GDLF Series Dimensions

Dimensions in mm

#### GDLF-S-66-50, GDLF-S-64-50

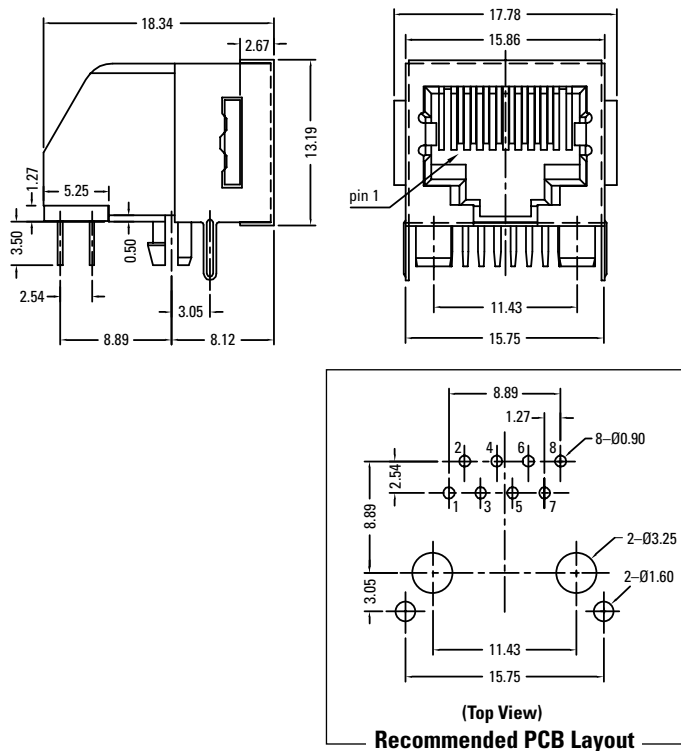


Recommended PCB Layout

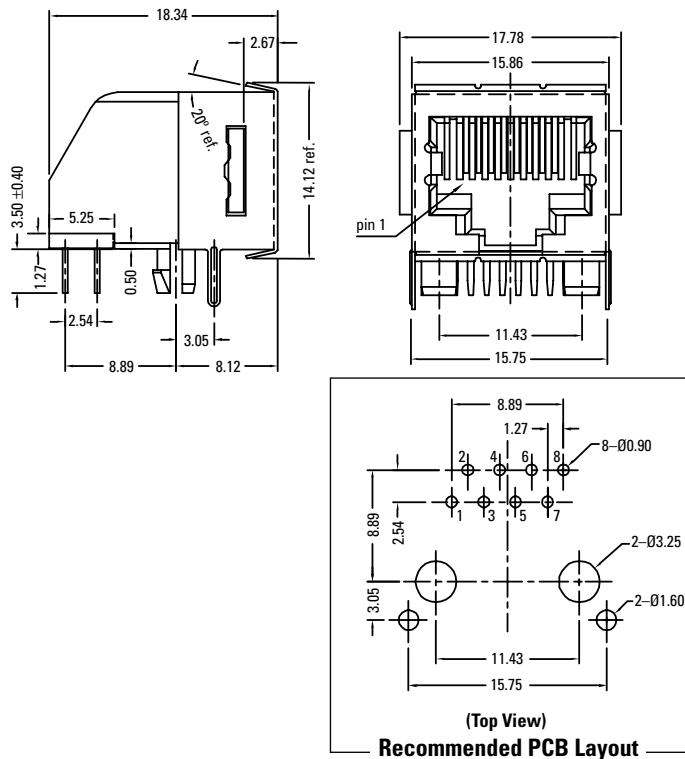
## GDLF Series Dimensions

Dimensions in mm

### GDLF-S-88-50



### GDLF-SA-88-50



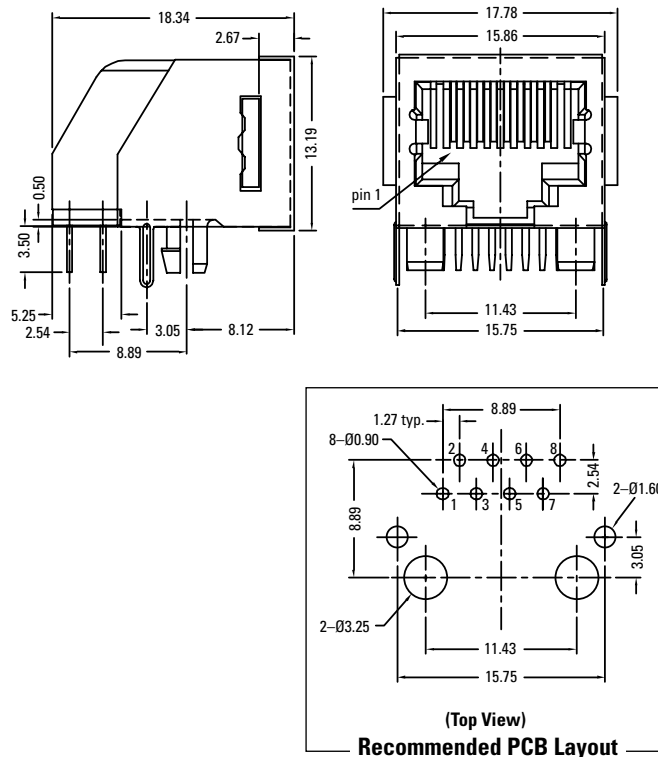
## MODULAR JACKS AND PLUGS

### GDLF Series

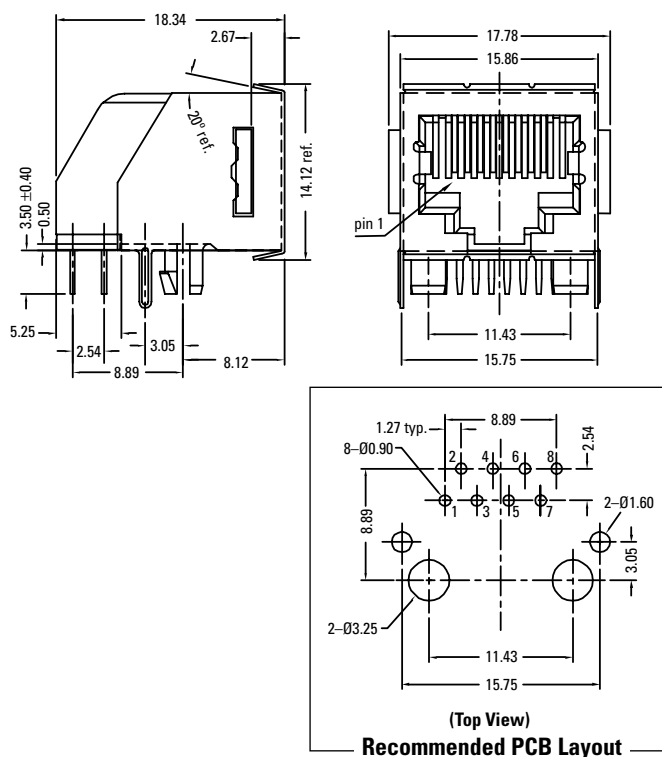
## GDLF Series Dimensions

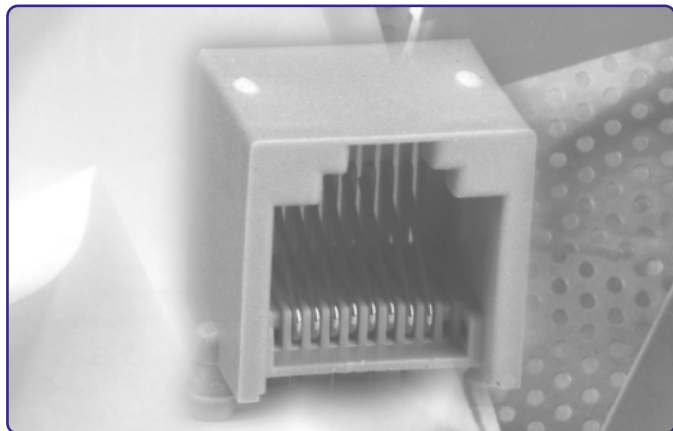
Dimensions in mm

### GDLF-S3-88-50



### GDLF-S3A-88-50





## GL Series Right Angle Modular Jack

### Features

- 0.570" Height
- Snap-In Board Retention Tabs
- Available in 4, 6, 8 and 10 Position Housings
- UL Recognized File No. E134345
- CSA/NRTL Certified File No. LR78160



### Performance Specifications

#### Materials and Finish

##### Housing Material

PBT Thermoplastic, UL 94V-0 Rated, Gray Color

##### Contact Material

Phosphor Bronze

##### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

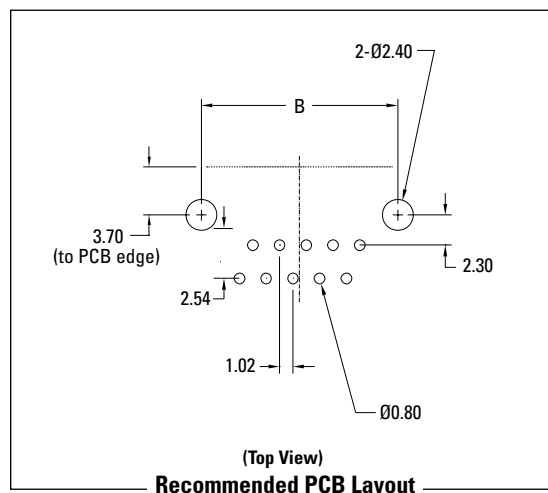
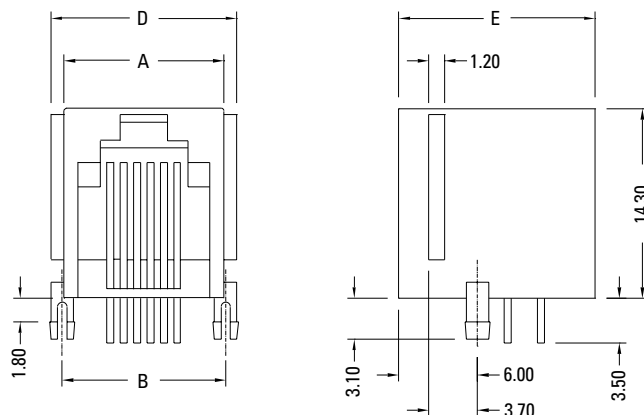
1.5 Amps

## MODULAR JACKS AND PLUGS

### GL Series

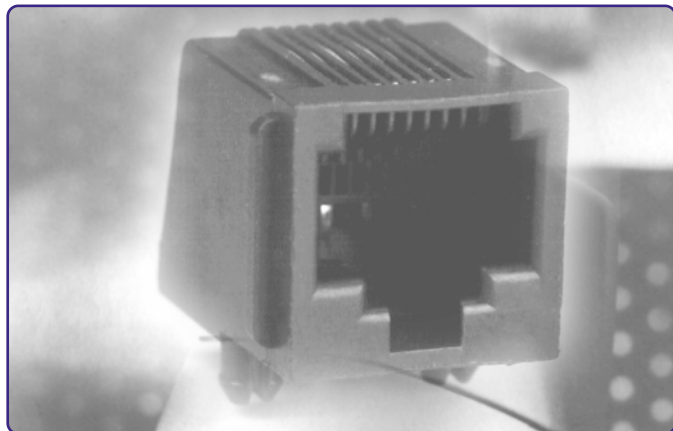
### GL Series Dimensions

Dimensions in mm



### Ordering Information

| Part Number | No. of Positions | No. of Contacts | Panel Stops | A    | B    | D    | E    |
|-------------|------------------|-----------------|-------------|------|------|------|------|
| GL-A-44     | 4                | 4               | Yes         | 12.2 | 12.0 | 14.2 | 15.0 |
| GL-N-44     | 4                | 4               | No          | 12.2 | 12.0 | —    | 15.0 |
| GL-N-44M    | 4                | 4               | No          | 10.0 | 10.0 | —    | 13.0 |
| GL-A-64     | 6                | 4               | Yes         | 12.2 | 12.0 | 14.2 | 15.0 |
| GL-N-64     | 6                | 4               | No          | 12.2 | 12.0 | —    | 15.0 |
| GL-N-64M    | 6                | 4               | No          | 12.2 | 12.0 | —    | 13.0 |
| GL-A-66     | 6                | 6               | Yes         | 12.2 | 12.0 | 14.2 | 15.0 |
| GL-N-66     | 6                | 6               | No          | 12.2 | 12.0 | —    | 15.0 |
| GL-N-66M    | 6                | 6               | No          | 12.2 | 12.0 | —    | 13.0 |
| GL-N-88M    | 8                | 8               | No          | 15.1 | 15.1 | —    | 13.0 |
| GL-N-1010M  | 10               | 10              | No          | 15.0 | 15.0 | —    | 13.0 |



## GDA Series Right Angle Modular Jack

### Features

- 0.595" Height
- Snap-In Board Retention Tabs
- Panel Stops
- Available in 4, 6 and 8 Position Housings
- UL Recognized File No. E134345
- CSA/NRTL Certified File No. LR78160



### Performance Specifications

#### Materials and Finish

##### Housing Material

PBT Thermoplastic, UL 94V-0 Rated, Black Color

##### Contact Material

Phosphor Bronze

##### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

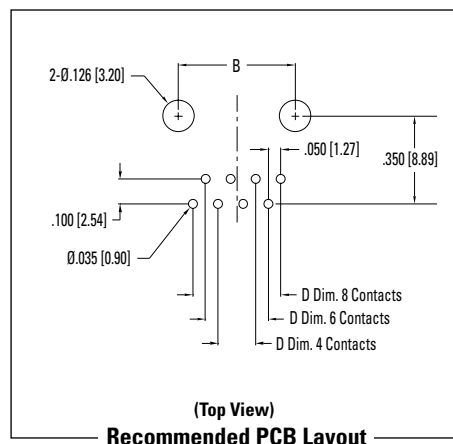
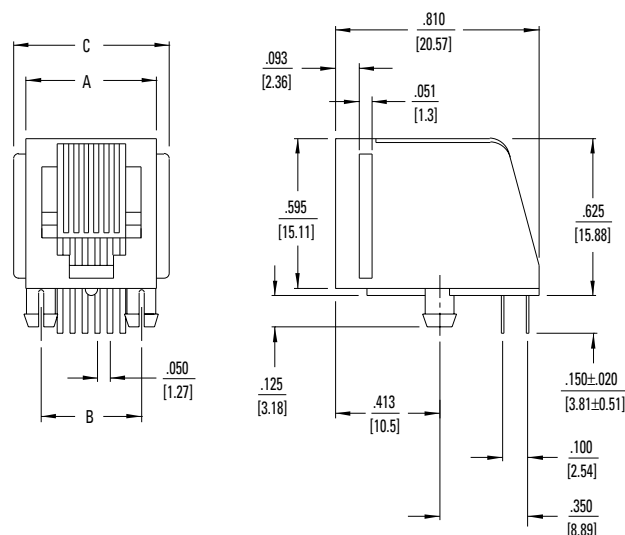
1.5 Amps

## MODULAR JACKS AND PLUGS

### GDA Series

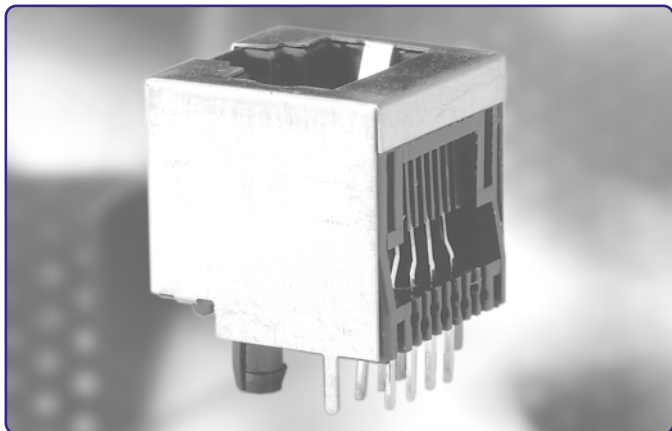
### GDA Series Dimensions

Dimensions in In [mm]



### Ordering Information

| Part Number | No. of Positions | No. of Contacts | A             | B             | C             | D            |
|-------------|------------------|-----------------|---------------|---------------|---------------|--------------|
| GD-A-44     | 4                | 4               | .445<br>11.30 | .300<br>7.62  | .540<br>13.72 | .150<br>3.81 |
| GD-A-64     | 6                | 4               | .520<br>13.20 | .400<br>10.16 | .614<br>15.60 | .150<br>3.81 |
| GD-A-66     | 6                | 6               | .520<br>13.20 | .400<br>10.16 | .614<br>15.60 | .250<br>6.35 |
| GD-A-88     | 8                | 8               | .600<br>15.24 | .450<br>11.43 | .693<br>17.60 | .350<br>8.89 |
| GD-A-88K    | 8<br>Keyed       | 8               | .600<br>15.24 | .450<br>11.43 | .693<br>17.60 | .350<br>8.89 |



## GDP Series Perpendicular Modular Jack

### Features



- For Top Entry
- Panel Stops, Shielding and Keying Options Available
- Available in 4, 6, and 8 Position Housings
- UL Recognized File No. E134345
- CSA/NRTL Certified File No. LR78160

## Performance Specifications

### Materials and Finish

#### Housing Material

Polyester, UL 94V-0 Rated, Black Color

#### Contact Material

Phosphor Bronze

#### Shield Material

Copper Alloy, Tin Plated

## Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GDP Series

### Ordering Information

|        |                |   |               |                    |                |
|--------|----------------|---|---------------|--------------------|----------------|
| GD-P   | N              | — | 6             | 6                  |                |
| Series | Shield Options |   | Size of Ports | Number of Contacts | Keying Options |

#### Series

GD-P - Perpendicular Modular Jack

#### Shield Options

A - Non-Shielded with Panel Stops

N - Non-Shielded without Panel Stops

AS - Shielded with Panel Stops (8 Positions Only)

NS - Shielded without Panel Stops (8 Positions Only)

#### Size of Ports

4 - 4 Positions

6 - 6 Positions

8 - 8 Positions

#### Number of Contacts

4 - 4 Contacts

6 - 6 Contacts

8 - 8 Contacts

#### Keying Options

Blank - Standard

K - Keyed (8 Positions Only)

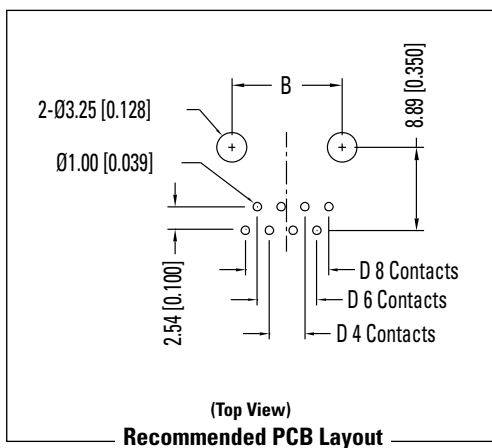
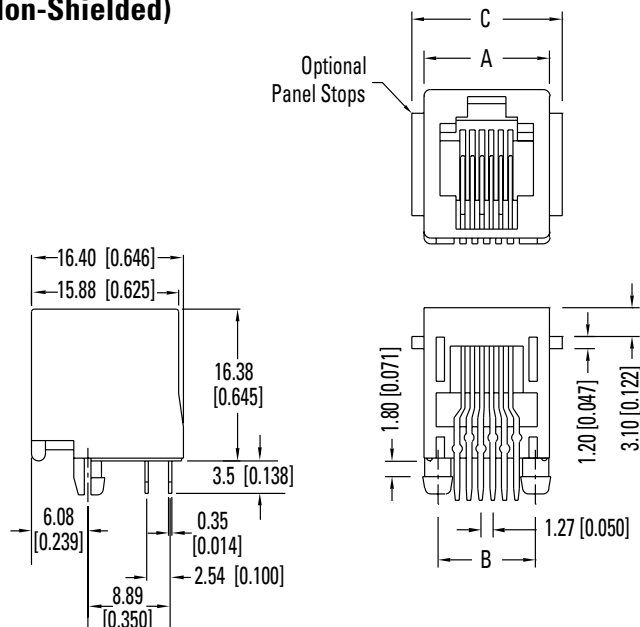
#### Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

## GDP Series Shielded Dimensions

Dimensions in mm [In]

### GD-PA (Non-Shielded)



| Part Number | Dimensions |       |       |      |
|-------------|------------|-------|-------|------|
|             | A          | B     | C     | D    |
| GD-PA-44    | 11.40      | 7.62  | 13.80 | 3.81 |
| GD-PA-64    | 13.40      | 10.16 | 15.80 | 3.81 |
| GD-PA-66    | 13.40      | 10.16 | 15.80 | 6.35 |
| GD-PA-88    | 15.45      | 11.43 | 18.00 | 8.89 |
| GD-PA-88K   | 15.45      | 11.43 | 18.00 | 8.89 |

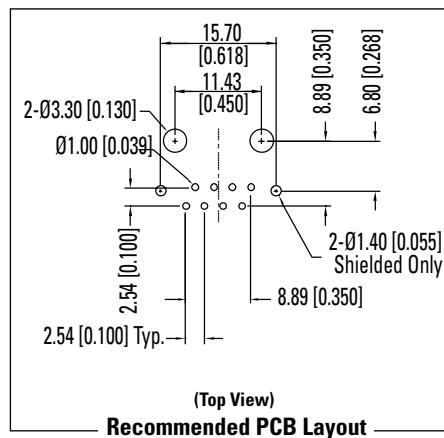
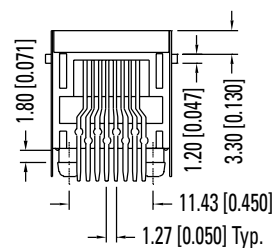
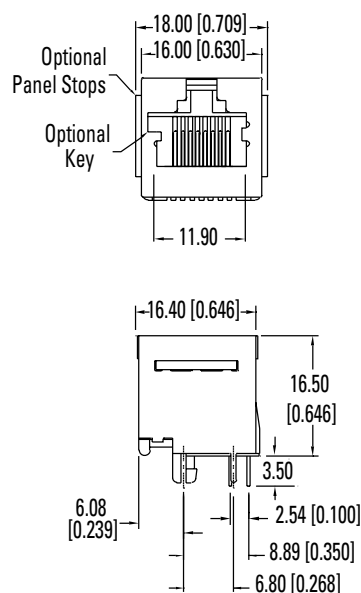
## MODULAR JACKS AND PLUGS

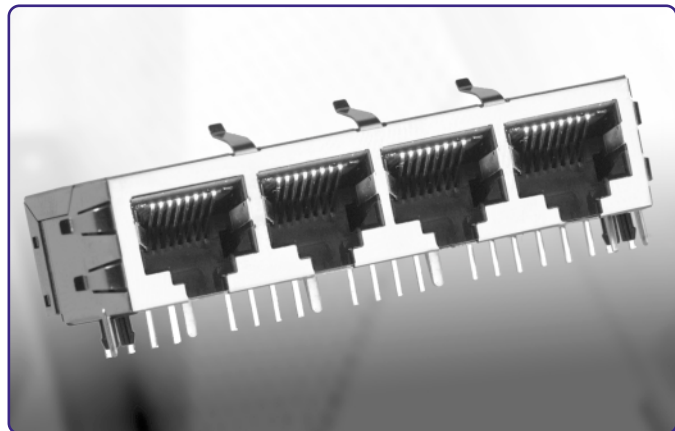
### GDP Series

## GDP Series Non Shielded Dimensions

Dimensions in mm [In]

### GD-PAS, GD-PNS (Shielded) 8 Positions Only





## GSG Series Right Angle Gang Jack

### Features



- Available in up to 8 Ports
- Available Fully Shielded for Category 5 Applications
- Standard and Reflow Compatible Through Hole Designs Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

PBT Thermoplastic, Glass Filled, UL94V-0 Rated, Black Color

##### Shield

Copper Alloy, Nickel Plated

##### Contact Material

Phosphor Bronze

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GSG Series

### Electrical Performance

Category 5 100MHz bandwidth performance.

Attenuation @ 100MHz less than 0.13dB.

Performance meets Near End Crosstalk (NEXT)

requirements of -40dB @ 100MHz per EIA/TIA 568A

in applications where UL approved Category 5 cable (GA27-3773-1) is used.

Shielded types offer 20dB shielding from 30MHz to 300MHz

### Ordering Information

| GSG    | NS            | 4            | 8             | 8               |                    |                 |
|--------|---------------|--------------|---------------|-----------------|--------------------|-----------------|
| Series | Shield Option | No. of Ports | Size of Ports | No. of Contacts | Ground Pin Spacing | Plating Options |

#### Series

GSG - Right Angle Gang Jack P.C.B. Mount

#### Shield Options - Consult Specifications for Details

N - Non-Shielded

NS - Shielded

NS2 - Shielded with Top Only Ground Tabs

NS7 - Shielded with Top and Side Ground Tabs

#### Number of Ports

2, 4, 5, 6, 8

#### Size of Ports

8 - 8 Positions

#### Number of Contacts

8 - 8 Contacts

#### Ground Pin Spacing for NS shield

Blank - 3.68

4.57 - 4.57mm

#### Ground Pin Spacing for NS2 shield

3.68 - 3.68mm

4.57 - 4.57mm

#### Ground Pin Spacing for NS7 shield

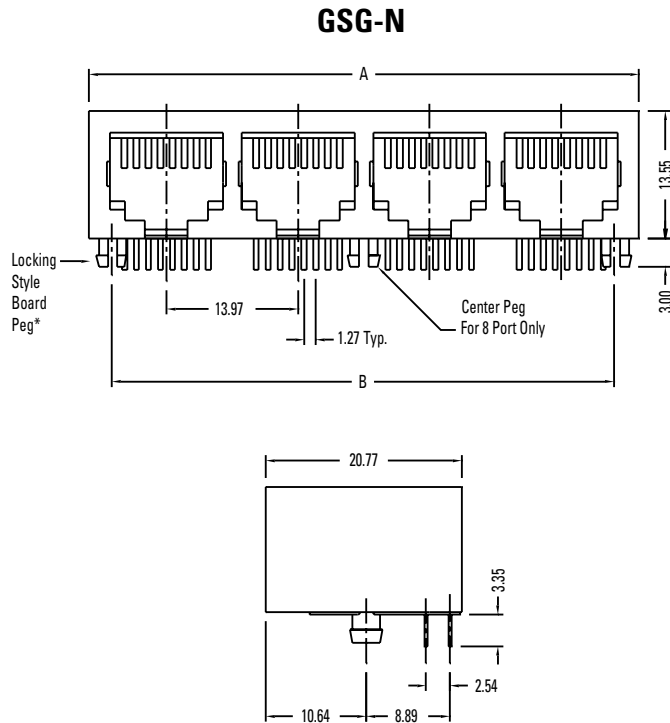
4.57 - 4.57mm

#### Plating Options

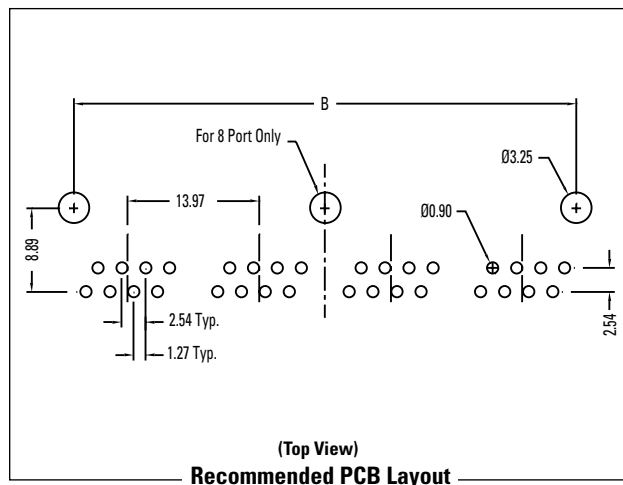
| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact area                                                                       |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

## GSG Series Dimensions

Dimensions in mm



## GSG-N



Please Consult Factory for PCB Layout for 5 Port

| GSG-N | Number of Ports |       |       |       |        |
|-------|-----------------|-------|-------|-------|--------|
|       | 2               | 4     | 5     | 6     | 8      |
| A     | 30.48           | 58.42 | 72.39 | 86.36 | 114.30 |
| B     | 25.40           | 53.34 | 67.31 | 81.28 | 109.22 |

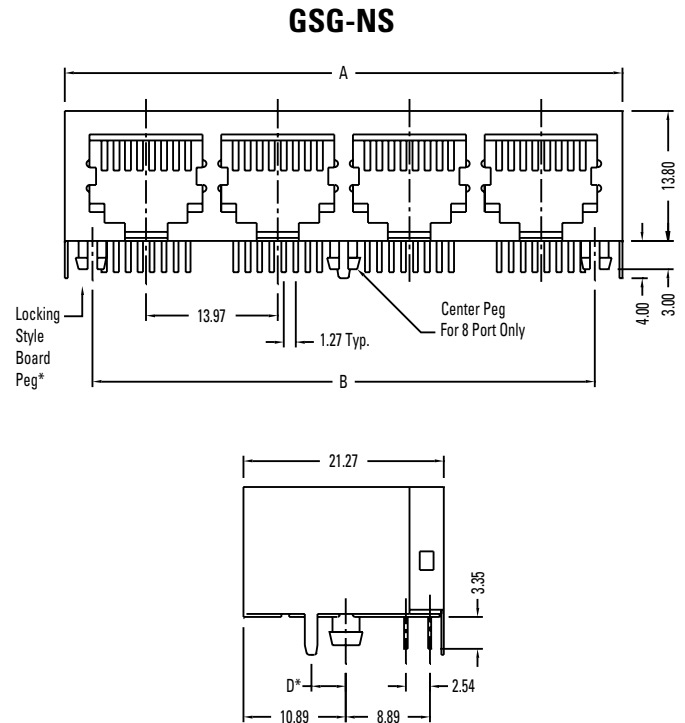
\*Some options only available in Diamond Style Board Peg.

## MODULAR JACKS AND PLUGS

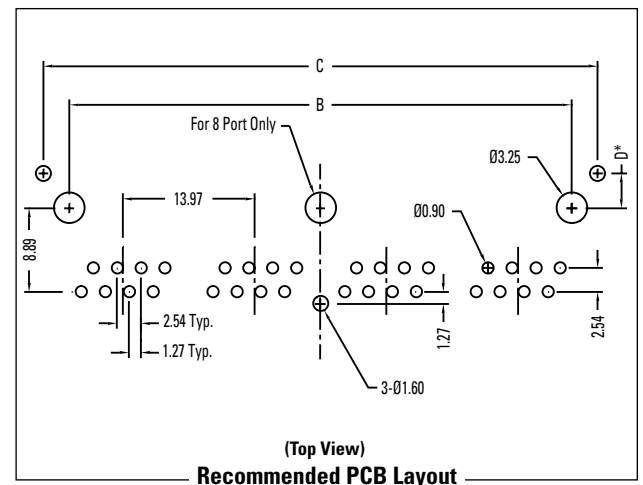
### GSG Series

## GSG Series Dimensions

Dimensions in mm



## GSG-NS



Please Consult Factory for PCB Layout for 5 Port

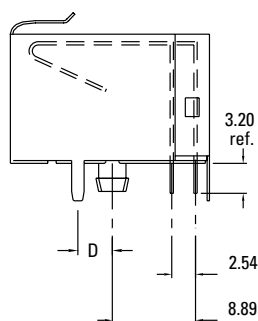
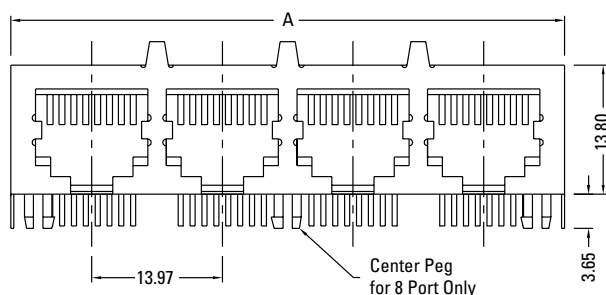
| GSG-NS | Number of Ports |       |       |       |        |
|--------|-----------------|-------|-------|-------|--------|
|        | 2               | 4     | 5     | 6     | 8      |
| A      | 31.12           | 59.03 | 73.03 | 87.00 | 114.94 |
| B      | 25.40           | 53.34 | 67.31 | 81.28 | 109.22 |
| C      | 30.87           | 58.81 | 72.78 | 86.75 | 114.69 |

D\* Ground Pin Spacing, see Page 76 for available options.

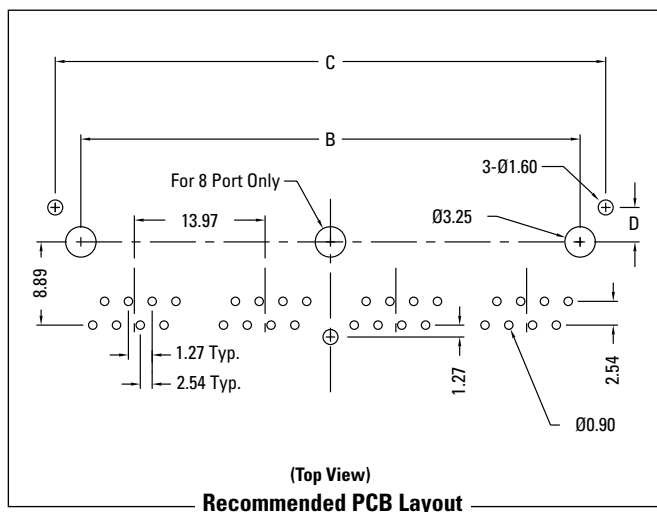
## GSG Series Dimensions

Dimensions in mm

### GSG-NS2



### GSG-NS2



Recommended PCB Layout

| GSG-NS2 | Number of Ports |       |       |        |
|---------|-----------------|-------|-------|--------|
|         | 2               | 4     | 6     | 8      |
| A       | 31.12           | 59.03 | 87.00 | 114.94 |
| B       | 25.40           | 53.34 | 81.28 | 109.22 |
| C       | 30.87           | 58.81 | 86.75 | 114.69 |

D\* Ground Pin Spacing, see Page 76 for available options.

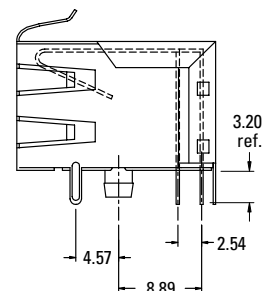
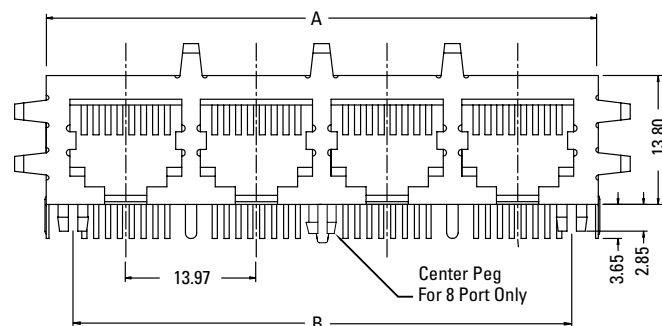
## MODULAR JACKS AND PLUGS

### GSG Series

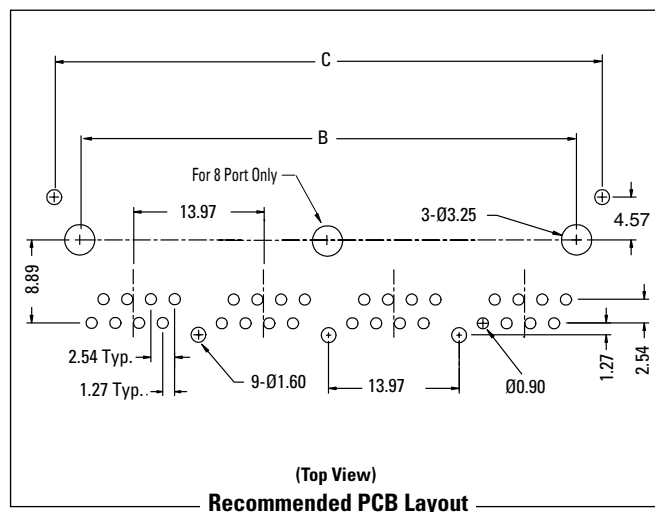
## GSG Series Dimensions

Dimensions in mm

### GSG-NS7

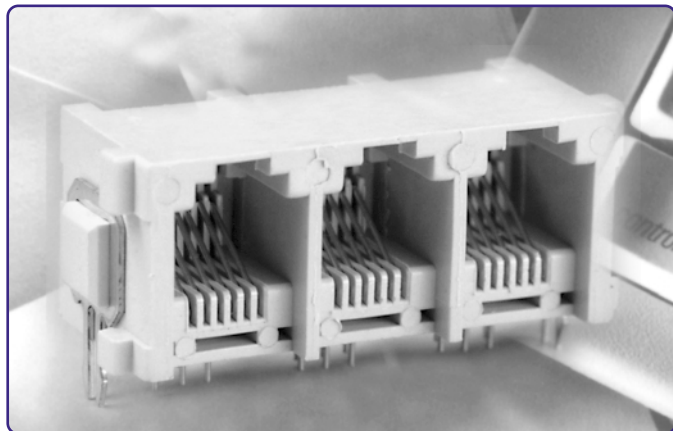


### GSG-NS7



Recommended PCB Layout

| GSG-NS7 | Number of Ports |        |
|---------|-----------------|--------|
|         | 4               | 8      |
| A       | 59.03           | 114.94 |
| B       | 53.34           | 109.22 |
| C       | 58.81           | 114.69 |



## GA/GP Series Gang Jacks Right Angle and Perpendicular PCB Mount

### Features



- Available in 6 and 8 Position Housings
- Available in Both Right Angle and Top Entry Versions
- Ribbed Pin Guides
- Metal Locking Brackets
- UL Recognized File No. E134345
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing Material

PBT Thermoplastic, UL 94V-0 Rated, Gray Color

##### Contact Material

Phosphor Bronze

#### Electrical Characteristics

##### Insulation Resistance

500 Megohms Min

##### Dielectric Withstanding Voltage

1000V AC for 1 Minute

##### Contact Resistance

20 Milliohms Max

##### Current Rating

1.5 Amps

## MODULAR JACKS AND PLUGS

### GA / GP Series

### Ordering Information

|        |   |                 |   |               |   |                    |   |                 |
|--------|---|-----------------|---|---------------|---|--------------------|---|-----------------|
| GA     | — | 4               | — | 6             | — | 4                  | — |                 |
| Series |   | Number of Ports |   | Size of Ports |   | Number of Contacts |   | Plating Options |

#### Series

GA-Right Angle P.C.B. Mount

GP-Perpendicular P.C.B. Mount

#### Number of Ports

2, 3, 4, 5, 6, 7, 8

#### Size of Ports

6-6 Positions (Up to 8 Ports Maximum)

8-8 Positions (Up to 4 Ports Maximum)

#### Number of Contacts

2-2 Contacts

4-4 Contacts

6-6 Contacts

8-8 Contacts

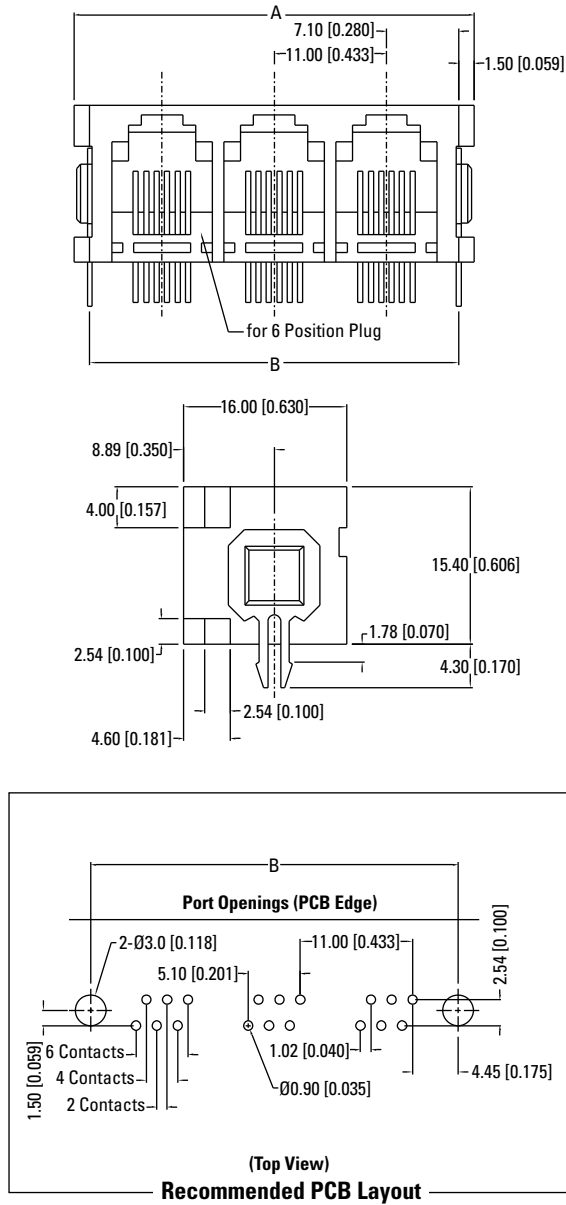
#### Plating Options

| Designator | Plating Description                                                                                                                                        |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000015 Gold on Contact Area                                                                    |
| 50         | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact Area to Comply with FCC Requirements Under #47 C.F.R. Part 68 Subpart F |

## GA Series Dimensions

(6 Position)

Dimensions in mm [In]



In  
mm

| Dimensions | Number of Ports       |                       |                       |                       |                       |                       |                       |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|            | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | 8                     |
| <b>A</b>   | <b>1.110</b><br>28.20 | <b>1.543</b><br>39.20 | <b>1.976</b><br>50.20 | <b>2.410</b><br>61.20 | <b>2.843</b><br>72.20 | <b>3.275</b><br>83.20 | <b>3.710</b><br>94.20 |
| <b>B</b>   | <b>0.984</b><br>25.00 | <b>1.417</b><br>36.00 | <b>1.850</b><br>47.00 | <b>2.283</b><br>58.00 | <b>2.717</b><br>69.00 | <b>3.150</b><br>80.00 | <b>3.583</b><br>91.00 |

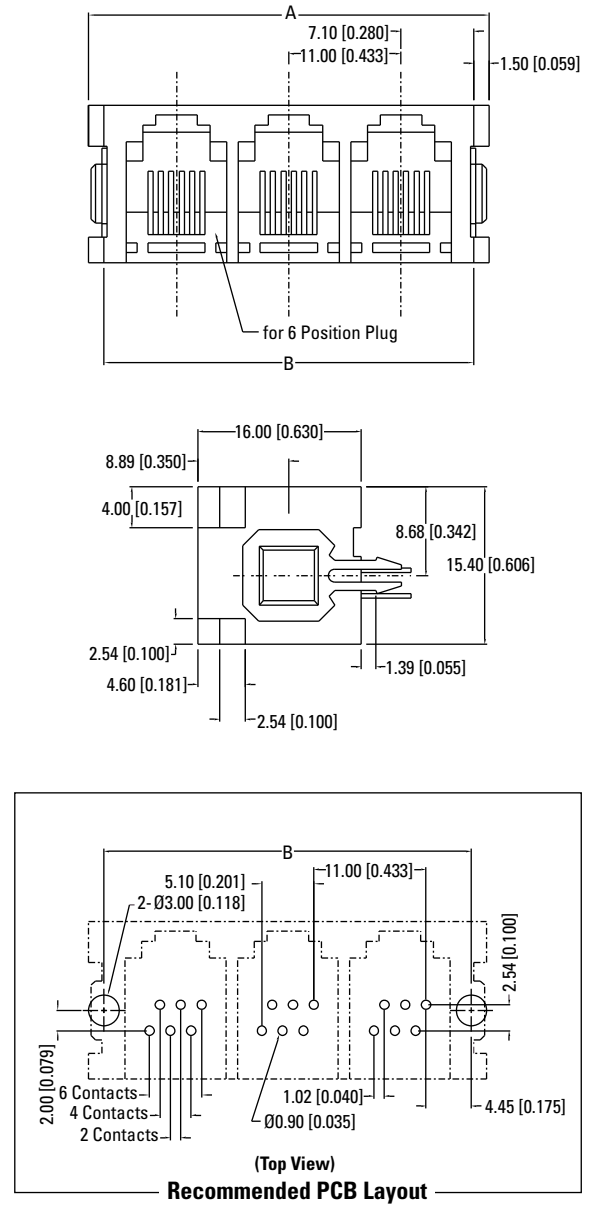
## MODULAR JACKS AND PLUGS

### GA / GP Series

## GP Series Dimensions

(6 Position)

Dimensions in mm [In]



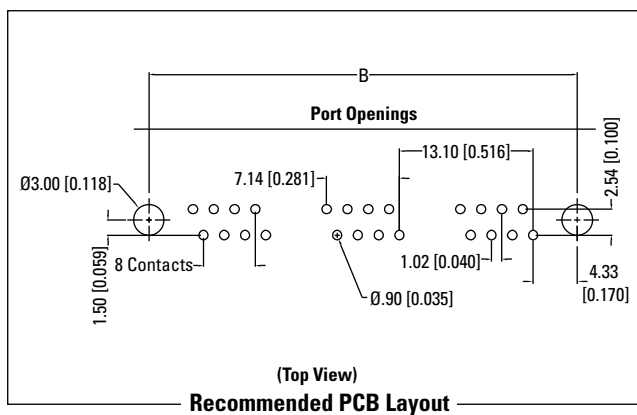
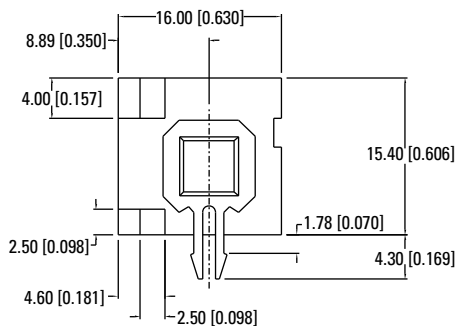
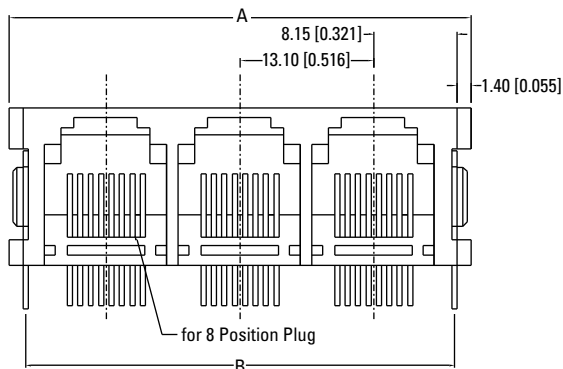
In  
mm

| Dimensions | Number of Ports       |                       |                       |                       |                       |                       |                       |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|            | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | 8                     |
| <b>A</b>   | <b>1.110</b><br>28.20 | <b>1.543</b><br>39.20 | <b>1.976</b><br>50.20 | <b>2.410</b><br>61.20 | <b>2.843</b><br>72.20 | <b>3.275</b><br>83.20 | <b>3.710</b><br>94.20 |
| <b>B</b>   | <b>0.984</b><br>25.00 | <b>1.417</b><br>36.00 | <b>1.850</b><br>47.00 | <b>2.283</b><br>58.00 | <b>2.717</b><br>69.00 | <b>3.150</b><br>80.00 | <b>3.583</b><br>91.00 |

## GA Series Dimensions

(8 Position)

Dimensions in mm [In]



In  
mm

| Dimensions | Number of Ports       |                       |                       |
|------------|-----------------------|-----------------------|-----------------------|
|            | 2                     | 3                     | 4                     |
| <b>A</b>   | <b>1.272</b><br>32.30 | <b>1.783</b><br>45.30 | <b>2.303</b><br>58.50 |
| <b>B</b>   | <b>1.138</b><br>28.90 | <b>1.654</b><br>42.00 | <b>2.169</b><br>55.10 |

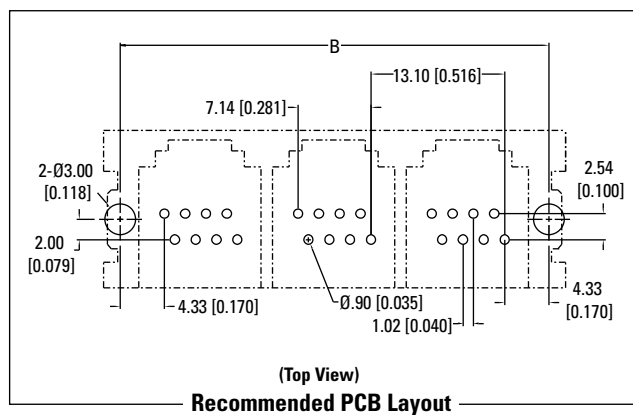
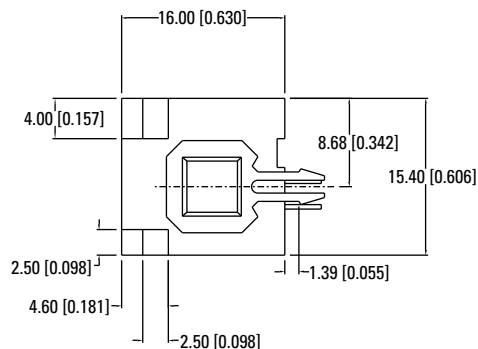
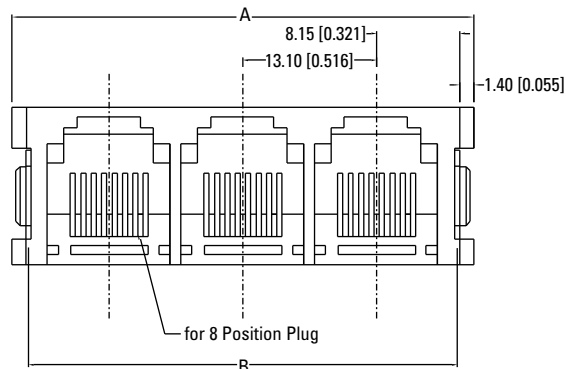
## MODULAR JACKS AND PLUGS

### GA / GP Series

## GP Series Dimensions

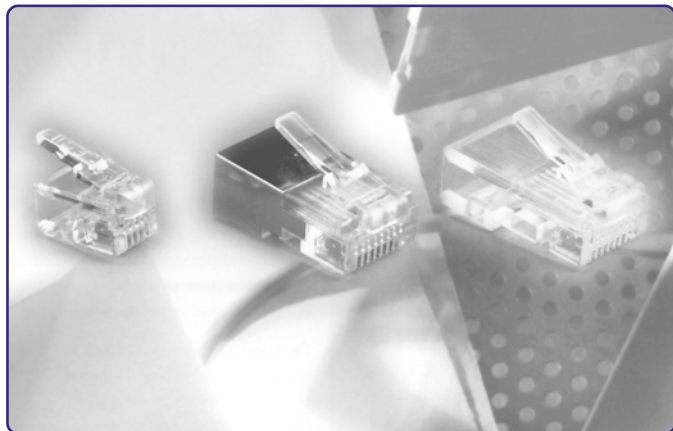
(8 Position)

Dimensions in mm [In]



In  
mm

| Dimensions | Number of Ports       |                       |                       |
|------------|-----------------------|-----------------------|-----------------------|
|            | 2                     | 3                     | 4                     |
| <b>A</b>   | <b>1.272</b><br>32.30 | <b>1.783</b><br>45.30 | <b>2.303</b><br>58.50 |
| <b>B</b>   | <b>1.138</b><br>28.90 | <b>1.654</b><br>42.00 | <b>2.169</b><br>55.10 |



## MP/MPS Series Modular Plugs

### Features

- Licensed From AT&T
- To Mate with W.E. Co. and FCC 68 Jacks
- All Pins From High Strength Copper Alloy JIS C5191R-H
- Available For Flat or Round Cable with Stranded or Solid Wires
- Shielded Version Available
- UL Recognized File No. E134345
- CSA/NRTL Certified File No. LR78160



### Performance Specifications

#### Materials and Finish

##### Housing Material

Polycarbonate, UL 94V-2 Rated

##### Contact Material

High Strength Copper Alloy JIS C5191R-H

### Electrical Characteristics

#### Insulation Resistance

500 Megohms Min

#### Dielectric Withstanding Voltage

1000V AC for 1 Minute

#### Contact Resistance

20 Milliohms Max

#### Current Rating

1.5 Amps

#### Recommended Wire Gauge

26-28 Awg.

#### Contact Plating Options

| Designator | Plating Description                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1000       | Gold Flash Over 0.0001 Nickel                                                                                                                                 |
| 5000       | Contacts are Plated with 0.0001 Nickel, Selective Plating 0.000050 Gold on Contact area to Comply with FCC Requirements Under No. 47 C.F.R. Part 68 Subpart F |

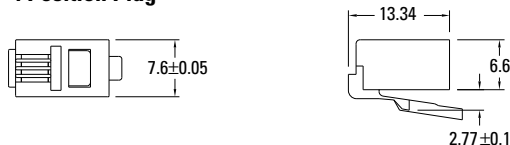
## MODULAR JACKS AND PLUGS

### MP / MPS Series

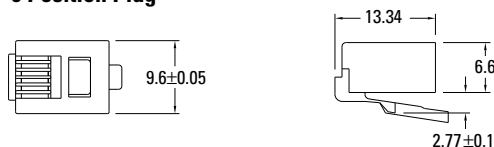
### Ordering Information

| MP                                           | 6                   | 4                  | —            | 1000            |           |
|----------------------------------------------|---------------------|--------------------|--------------|-----------------|-----------|
| Series                                       | Number of Positions | Number of Contacts | Cable Jacket | Plating Options | Wire Type |
| <b>Series</b>                                |                     |                    |              |                 |           |
| MP - Kycon Modular Telephone Plug            |                     |                    |              |                 |           |
| MPS - Kycon Shielded Modular Telephone Plug* |                     |                    |              |                 |           |
| <b>Number of Positions</b>                   |                     |                    |              |                 |           |
| 4, 6, 8, 10                                  |                     |                    |              |                 |           |
| <b>Number of Contacts</b>                    |                     |                    |              |                 |           |
| 2 - 2 Contacts                               |                     |                    |              |                 |           |
| 4 - 4 Contacts                               |                     |                    |              |                 |           |
| 6 - 6 Contacts                               |                     |                    |              |                 |           |
| 8 - 8 Contacts                               |                     |                    |              |                 |           |
| 10 - 10 Contacts (Round Cable Only)          |                     |                    |              |                 |           |
| <b>Cable Jacket</b>                          |                     |                    |              |                 |           |
| Blank - Flat Cable                           |                     |                    |              |                 |           |
| R - Round Cable                              |                     |                    |              |                 |           |
| <b>Wire Type</b>                             |                     |                    |              |                 |           |
| Blank - Stranded Wire                        |                     |                    |              |                 |           |
| S - Solid Wire                               |                     |                    |              |                 |           |
| <b>Crimp Machine Compatibility</b>           |                     |                    |              |                 |           |
| Blank - Standard                             |                     |                    |              |                 |           |
| A - Shifted Crimp Location*                  |                     |                    |              |                 |           |
| <b>Other Options</b>                         |                     |                    |              |                 |           |
| K - Keyed*                                   |                     |                    |              |                 |           |

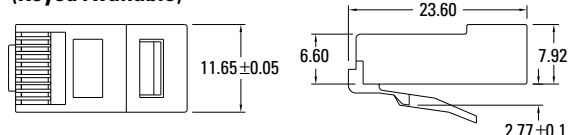
#### 4 Position Plug



#### 6 Position Plug



#### 8-10 Position Plug (Keyed Available)



Dimensions in mm

\*Contact factory for specifications. 888-KYCON-22

**KYCON continues its leadership in Mini-DIN and Circular DIN connectors by offering a complete line of styles and options.**

**Features:**

- Audio, Video, Computer and Digital Equipment Applications
- Snap and Lock Options Available
- PCB and Panel Mount Options
- Variety of Shielding Options for Better Conductivity, Grounding and EMI/RFI Protection
- Visual and Mechanical Polarization for Plug Inspection
- CSA/NRTL Certified File No. LR78160

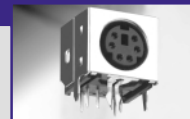


## MINI-DINs / CIRCULAR DINs

### Directory

#### Right Angle Mini-DINs

|                           |           |
|---------------------------|-----------|
| <b>KMDG - Gold Plated</b> | <b>84</b> |
| <b>KFMDG - Ferrite</b>    | <b>85</b> |
| <b>KMDG - Stacked</b>     | <b>88</b> |
| <b>KMDT - Slim Design</b> | <b>90</b> |



#### Vertical Mini-DINs

|                |           |
|----------------|-----------|
| <b>KMDVL -</b> | <b>92</b> |
|----------------|-----------|



#### Panel Mount Mini-DINs

|                |           |
|----------------|-----------|
| <b>KMDPL -</b> | <b>94</b> |
|----------------|-----------|



#### Cable Mount Mini-DINs

|                |           |
|----------------|-----------|
| <b>KMDLA -</b> | <b>95</b> |
|----------------|-----------|



#### Right Angle Circular DINs

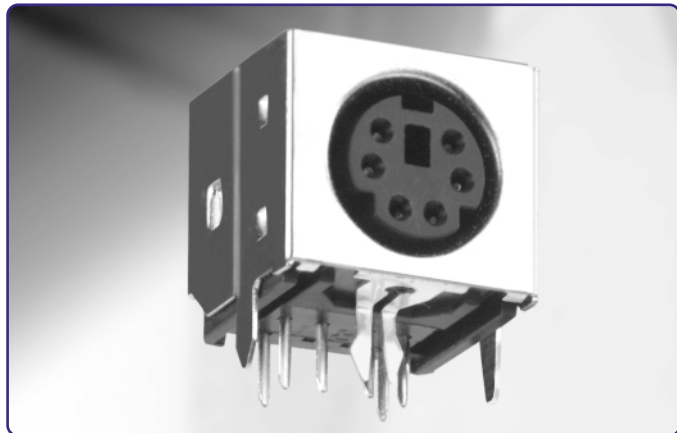
|              |           |
|--------------|-----------|
| <b>KCD -</b> | <b>96</b> |
|--------------|-----------|



#### Options:

| Series            | KMDG | KFMDG | KMDG Stacked | KMDT | KMDVL | KMDPL | KMDLA | KCD |
|-------------------|------|-------|--------------|------|-------|-------|-------|-----|
| Right Angle       | •    | •     | •            | •    |       |       |       | •   |
| Vertical          |      |       |              |      | •     |       |       |     |
| Panel Mount       |      |       |              |      |       | •     |       |     |
| Cable Mount       |      |       |              |      |       |       | •     |     |
| Socket            | •    | •     | •            | •    | •     | •     |       | •   |
| Plug              |      |       |              |      |       |       | •     |     |
| Non-Shielded      | •    |       |              |      | •     | •     | •     | •   |
| Shielded          | •    | •     | •            | •    |       |       |       | •   |
| Reflow Compatible | •    |       | •            | •    |       |       |       | •   |
| Surface Mount     |      |       |              | •    |       |       |       |     |
| Stacked           |      |       | •            |      |       |       |       |     |
| Ferrite           |      | •     |              |      |       |       |       |     |
| 3 Contacts        | •    | •     |              |      | •     | •     | •     | •   |
| 4 Contacts        | •    | •     | •            | •    | •     | •     | •     |     |
| 5 Contacts        | •    | •     |              |      | •     | •     | •     | •   |
| 6 Contacts        | •    | •     | •            | •    | •     | •     | •     | •   |
| 7 Contacts        | •    | •     |              |      |       |       | •     | •   |
| 8 Contacts        | •    | •     | •            |      | •     | •     | •     | •   |
| 9 Contacts        | •    |       |              |      |       |       |       |     |

KYCON Tech Support: **1-888-KYCON-22**  
or E-mail: [sales@kycon.com](mailto:sales@kycon.com)



## KMDG Series Right Angle Mini-DIN Gold Plated

### Features



- Audio, Video, Computer, and Digital Equipment Applications
- PC99 Colors Available
- Shielded Options Available for Good Conductivity, Grounding and EMI/RFI Protection
- Mates with Standard and Snap and Lock Plugs
- Visual and Mechanical Polarization for Plug Insertion
- Gold Plated Contacts
- Reflow Compatible Design Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Body

KMDG - PBT Thermoplastic, Black, Purple, Green or Yellow Color, UL94V-0 Rated

KMDGHT - High Temperature Thermoplastic, Black Color, UL94V-0 Rated

#### Contacts

Phosphor Bronze, Gold Plated

#### Shield

Standard: Brass, Tin/Lead Plated

HT: Brass, Tin Plated

### Mechanical Characteristics

#### Insertion Force

0.5 kg - 4.5 kg

#### Extraction Force

0.4 kg - 3.5 kg

#### Durability

500 Cycles Minimum with Test Plug

## MINI-DINs / CIRCULAR DINs

### KMDG Series

### Electrical Characteristics

#### Contact Current Rating

2 Amp at 12V DC

#### Insulation Resistance

500 Megohms Min at 500V DC

#### Contact Resistance

*Before Durability Test*

Plug to Shield: 50 Milliohms Max.

Plug to Terminals: 30 Milliohms Max

*After Durability Test*

Plug to Shield: 100 Milliohms Max

Plug to Terminals: 60 Milliohms Max.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Operating Temperature

-25°C to +85°C

### Ordering Information

| KMDG                                                                                                                                               | — | 6                  | S            | — | BS                |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------|--------------|---|-------------------|-----------------|
| Series                                                                                                                                             |   | Number of Contacts | Contact Type |   | Shielding Options | Plating Options |
| <b>Series*</b><br>KMDG - Kycon Right Angle PCB Mount Mini-DIN<br>KMDGHT - Reflow Compatible Version**                                              |   |                    |              |   |                   |                 |
| <b>Number of Contacts</b><br>3, 4, 5, 6, 7, 8, 9                                                                                                   |   |                    |              |   |                   |                 |
| <b>Contact Type</b><br>S - Receptacle                                                                                                              |   |                    |              |   |                   |                 |
| <b>Shielding Options</b><br>N - Non-Shielded<br>AS - Sides and Back Shielded<br>BS - Fully Shielded<br>BSC - Fully Shielded with Crimped Side Tabs |   |                    |              |   |                   |                 |

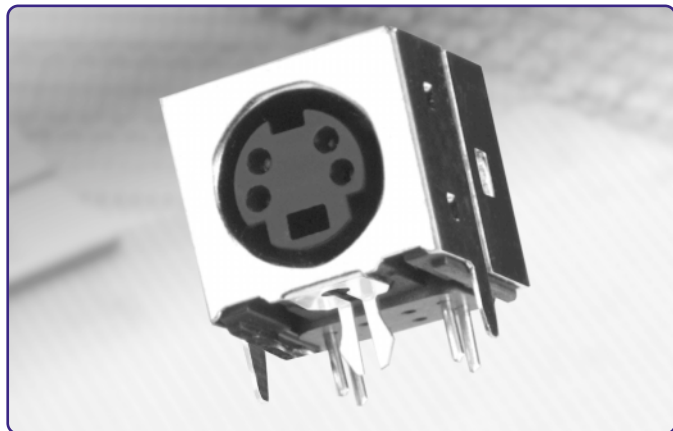
#### Plating Option

|          |                                                                                         |
|----------|-----------------------------------------------------------------------------------------|
| Standard | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails                 |
| 30       | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.** |

For Dimensions and PCB Layout Please See Page 86 and 87

\*KMDG-GEO-7S-BS also available (see page 86)

\*\* Minimum Quantities May Apply



## KFMDG Series Right Angle Mini-DIN with Ferrite

### Features



- Audio, Video, Computer and Digital Equipment Applications
- Shielded Options Available for Good Conductivity, Grounding and EMI/RFI Protection
- Mates with Standard and Snap and Lock Plugs
- Visual and Mechanical Polarization for Plug Insertion
- Gold Plated Contacts
- CSA/NRTL Certified File No. LR78160
- Ferrite Block for High Frequency Noise Filtering

### Performance Specifications

#### Body

KFMDG - PBT Thermoplastic, Black Color, UL94V-0 Rated

#### Contacts

Phosphor Bronze, Gold Plated

#### Shield

Brass, Tin/Lead Plated

### Mechanical Characteristics

#### Insertion Force

0.5 kg - 4.5 kg

#### Extraction Force

0.4 kg - 3.5 kg

#### Durability

500 Cycles Minimum with Test Plug

## MINI-DINs / CIRCULAR DINs

### KFMDG Series

### Electrical Characteristics

#### Contact Current Rating

2 Amp at 12V DC

#### Insulation Resistance

500 Megohms Min

#### Contact Resistance

*Before Durability Test*

Plug to Shield: 50 Milliohms Max.

Plug to Terminals: 30 Milliohms Max

*After Durability Test*

Plug to Shield: 100 Milliohms Max

Plug to Terminals: 60 Milliohms Max.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Operating Temperature

-25°C to +85°C

### Ferrite Specifications

| Impedance | Value     | Test Frequency |
|-----------|-----------|----------------|
| Z (Ohm)   | 13-15 Min | 30 MHz         |
| Z (Ohm)   | 15-18 Min | 50 MHz         |
| Z (Ohm)   | 20-22 Min | 100 MHz        |

### Ordering Information

|                                                                                               |   |                       |                 |   |                      |                    |
|-----------------------------------------------------------------------------------------------|---|-----------------------|-----------------|---|----------------------|--------------------|
| KFMDG                                                                                         | — | 6                     | S               | — | BS                   |                    |
| Series                                                                                        |   | Number of<br>Contacts | Contact<br>Type |   | Shielding<br>Options | Plating<br>Options |
| <b>Series</b><br>KFMDG - Right Angle PCB Mount Mini-DIN with Ferrite                          |   |                       |                 |   |                      |                    |
| <b>Number of Contacts</b><br>3, 4, 5, 6, 7, 8                                                 |   |                       |                 |   |                      |                    |
| <b>Contact Type</b><br>S - Receptacle                                                         |   |                       |                 |   |                      |                    |
| <b>Shielding Options</b><br>BS - Fully Shielded<br>BSC- Fully Shielded with Crimped Side Tabs |   |                       |                 |   |                      |                    |

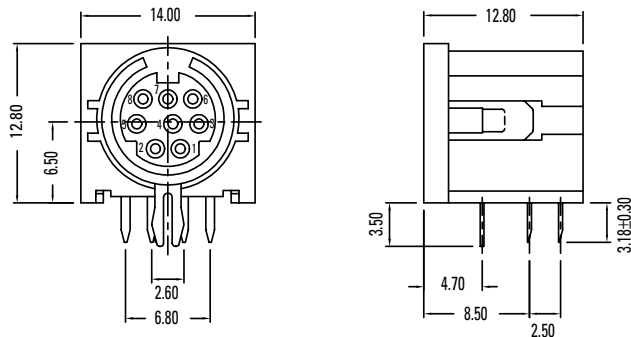
#### Plating Option

|          |                                                                                       |
|----------|---------------------------------------------------------------------------------------|
| Standard | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails               |
| 30       | 30μ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails. |

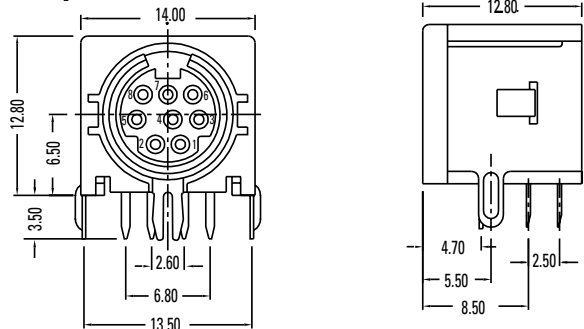
## KMDG & KFMDG Series Dimensions

Dimensions in mm

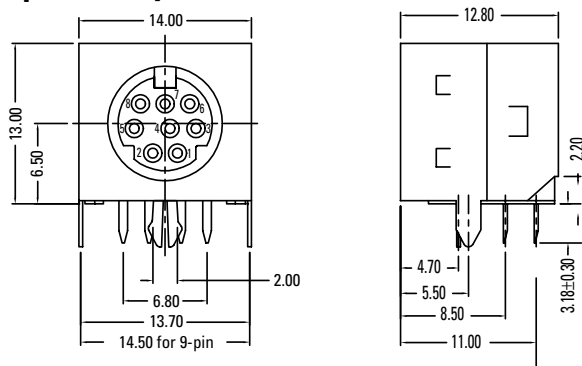
### -N Option (Non-Shielded)



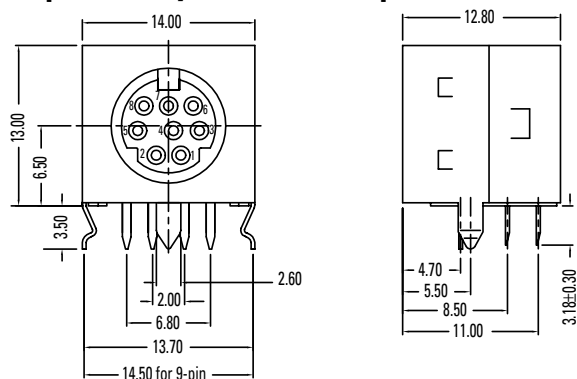
### -AS Option (4 Side Shielded)



### -BS Option (Fully Shielded)



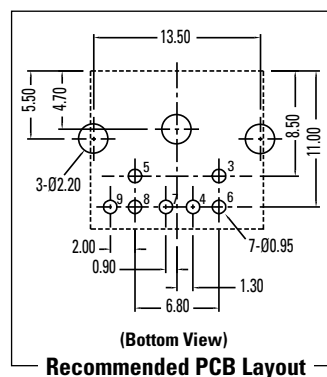
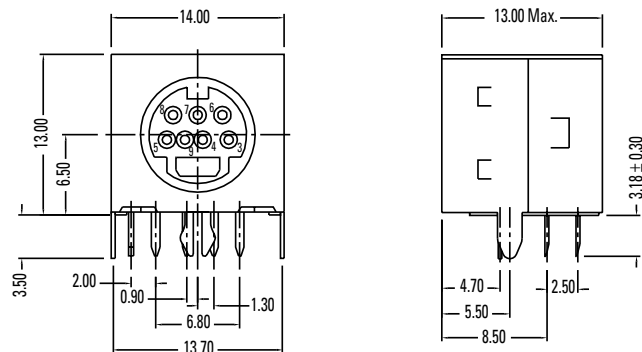
### -BSC Option (Fully Shielded Crimped Side Tabs)



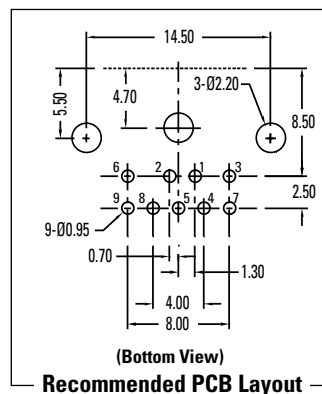
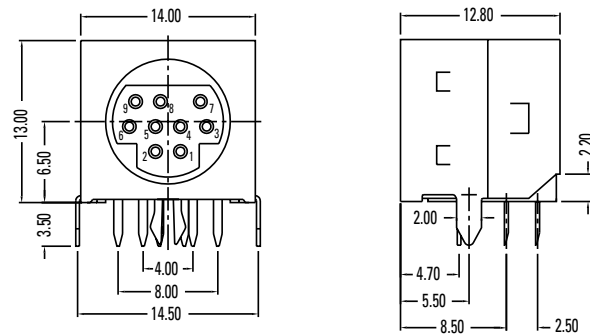
## MINI-DINs / CIRCULAR DINs

### KMDG & KFMDG Series

### KMDG-GEO-7S-BS (7 Position, GEO Port)



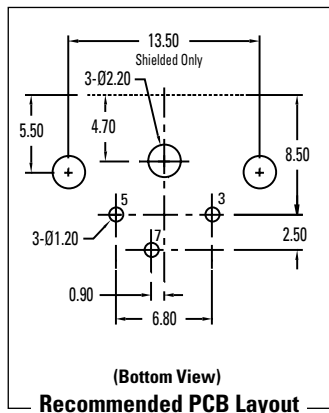
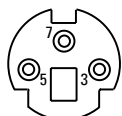
### KMDG-9S-BS (9 Position, Fully Shielded)



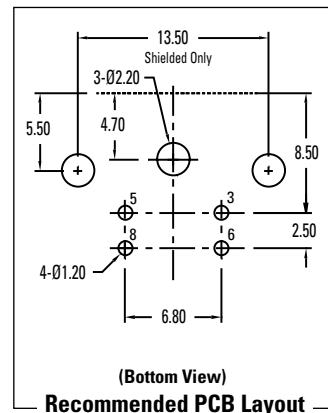
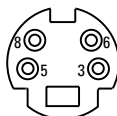
**KMDG & KFMDG Series**  
**Socket Configurations and**  
**Recommended PCB Layout**

Dimensions in mm

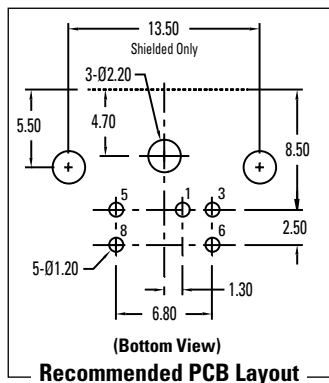
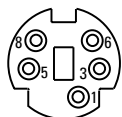
**3 Position**



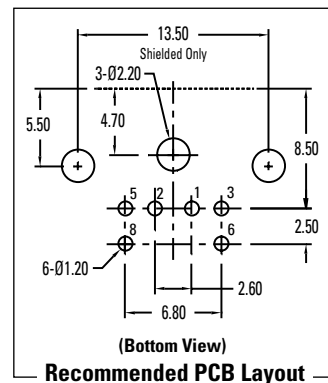
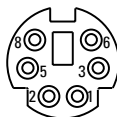
**4 Position**



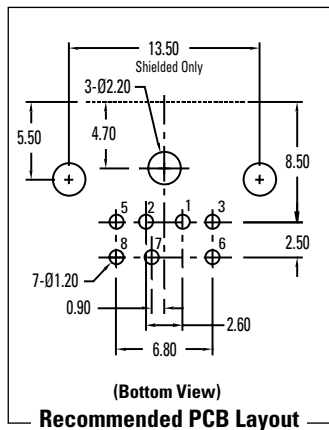
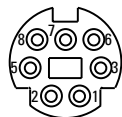
**5 Position**



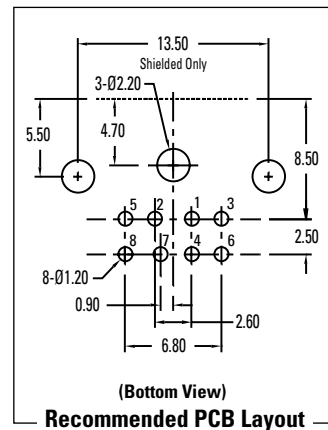
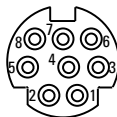
**6 Position**



**7 Position**



**8 Position**





## KMDG Series Stacked Mini-DIN Gold Plated

### Features



- Audio, Video, Computer and Digital Equipment Applications
- Mates with Standard and Snap and Lock Plugs
- Space Saving Stacked Design
- Shielded Options Available for Good Conductivity, Grounding and EMI/RFI Protection
- Visual and Mechanical Polarization for Plug Insertion
- Gold Plated Contacts
- Reflow Compatible Design Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Body and Base



KMDG - PBT Thermoplastic, Black Color, UL94V-0 Rated  
KMDGHT - High Temperature Thermoplastic, Black Color, UL94V-0 Rated

#### Contacts

Phosphor Bronze, Gold Plated

#### Shield

Standard: Brass, Tin/Lead Plated  
HT: Brass, Tin Plated

### Mechanical Characteristics

#### Insertion Force

0.5 kg - 4.5 kg

#### Extraction Force

0.4 kg - 3.5 kg

#### Durability

500 Cycles Minimum with Test Plug

## MINI-DINs / CIRCULAR DINs

### KMDG-\*S / \*S Series

### Electrical Characteristics

#### Contact Current Rating

1 Amp at 12V DC

#### Insulation Resistance

500 Megohms Min

#### Contact Resistance

*Before Durability Test*

Plug to Shield: 50 Milliohms Max.

Plug to Terminals: 30 Milliohms Max

*After Durability Test*

Plug to Shield: 100 Milliohms Max

Plug to Terminals: 60 Milliohms Max.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Operating Temperature

-25°C to +85°C

### Ordering Information

|                                                                                                                                                                                                                                                                |   |               |   |                |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------|---|----------------|-----------------|
| KMDG                                                                                                                                                                                                                                                           | — | 6S/6S         | — | S4N            |                 |
| Series                                                                                                                                                                                                                                                         |   | Configuration |   | Shield Options | Plating Options |
| <b>Series</b><br>KMDG - Kycon Right Angle PCB Mount Mini-DIN<br>KMDGHT - Reflow Compatible Version*                                                                                                                                                            |   |               |   |                |                 |
| <b>Configuration</b><br>4S/4S - 4 Contacts over 4 Contacts<br>6S/6S - 6 Contacts over 6 Contacts<br>4S/6S - 4 Contacts over 6 Contacts<br>4S/8S - 4 Contacts over 8 Contacts**<br>6S/8S - 6 Contacts over 8 Contacts**<br>8S/8S - 8 Contacts over 8 Contacts** |   |               |   |                |                 |
| <b>Shield Options</b><br>S4N - Fully Shielded<br>S4N1 - Fully Shielded with Mounting Hole<br>S4N2 - Fully Shielded with Shifted Ground Pin and Mounting Hole                                                                                                   |   |               |   |                |                 |

### Plating Option

|          |                                                                                       |
|----------|---------------------------------------------------------------------------------------|
| Standard | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails.              |
| 30       | 30μ"gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.* |

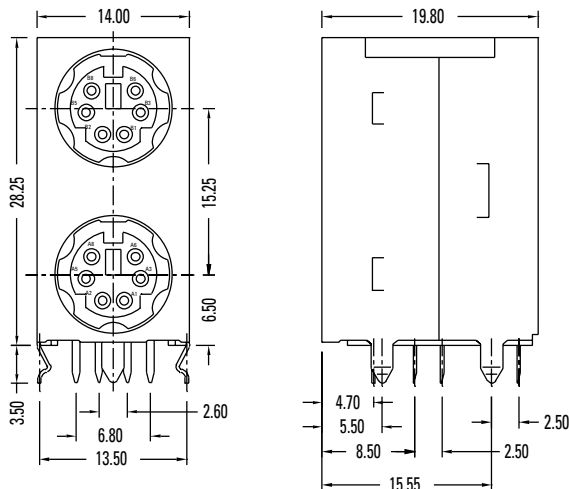
\* Minimum Quantities May Apply

\*\* Contact Factory for Specifications

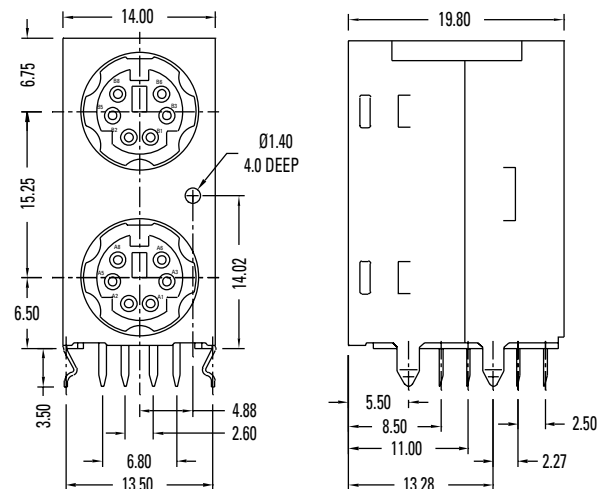
**KMDG-\*S/\*S Series Dimensions**

Dimensions in mm

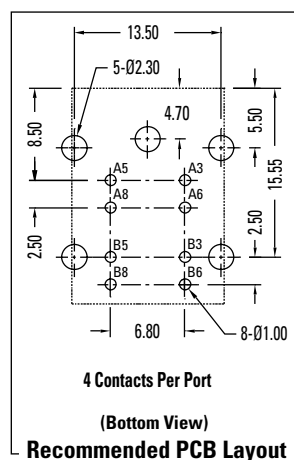
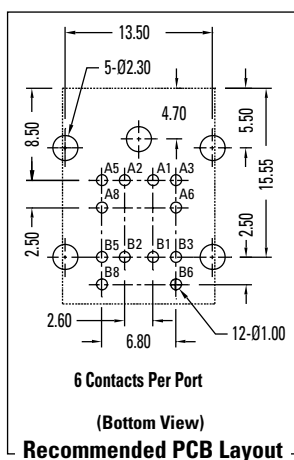
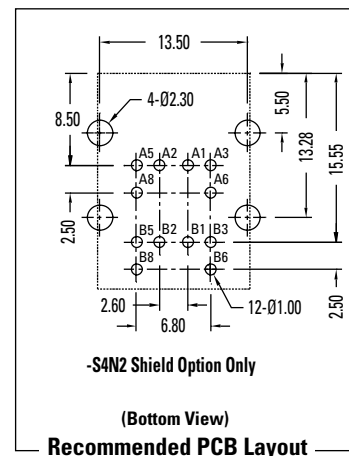
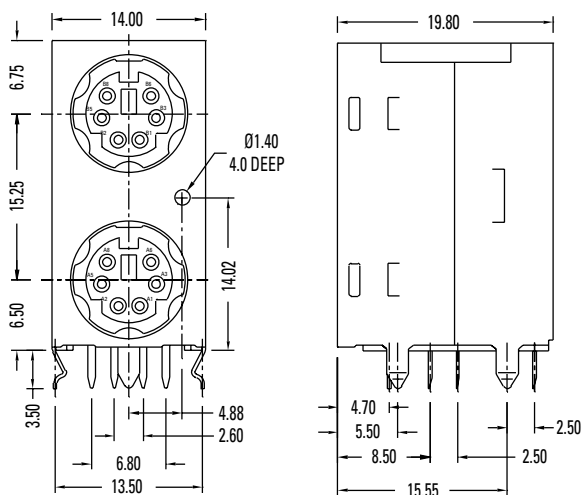
**-S4N Shield Option (standard)**

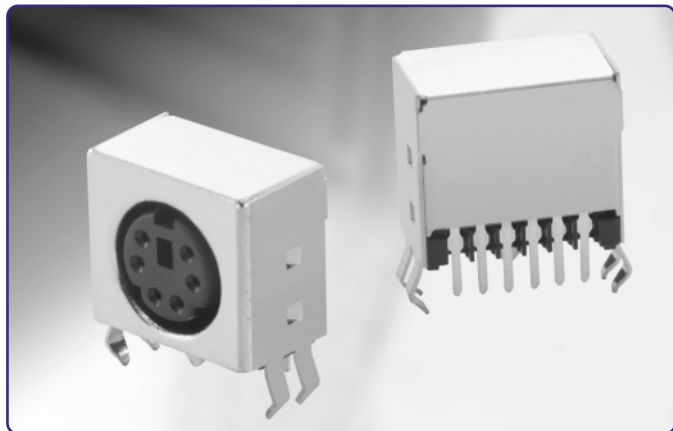


**-S4N2 Shield Option  
(with shifted tabs and mounting hole)**



**-S4N1 Shield Option (with mounting hole)**





## KMDT Series Slim Design Right Angle Mini-DIN

### Features



- Audio, Video, Computer and Digital Equipment Applications
- Slim Design Saves On Board Space
- Mates with Standard and Snap and Lock Plugs
- Available in SMT and Reflow Compatible Through Hole Designs
- Full Shield for EMI/RFI Protection
- Contact Area with Gold Plating
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Body

SMT, HT: High Temperature Thermoplastic, Black Color, UL94V-0 Rated

Standard: PBT Thermoplastic, Black Color, UL94V-0 Rated

##### Contacts

SMT, HT: Phosphor Bronze, Gold Plated

Standard: Phosphor Bronze, Tin/Lead Plated

##### Shield

Phosphor Bronze, Tin Plated

### Mechanical Characteristics

**Durability:** 500 Cycles Min.

**Insertion Force:** 0.5kg - 4.5kg

**Extraction Force:** 0.4kg - 3.5kg

**Operating Temperature:** -25°C to +85°C

## MINI-DINs/ CIRCULAR DINs

### KMDT Series

### Electrical Characteristics

#### Contact Current Rating

*Before Durability Test*

Plug to Shield - 50 Milliohms Max.

Plug to Terminals - 30 Milliohms Max.

*After Durability Test*

Plug to Shield - 100 Milliohms Max.

Plug to Terminals - 60 Milliohms Max.

#### Insulation Resistance

500 Megohms Min.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Current Rating

1 Amp at 12V DC

### Ordering Information

| KMDT                                                                                                        | — | SMT   | — | 6                  | — | S            | — | BSC             |  |
|-------------------------------------------------------------------------------------------------------------|---|-------|---|--------------------|---|--------------|---|-----------------|--|
| Series                                                                                                      |   | Style |   | Number of Contacts |   | Contact Type |   | Plating Options |  |
| <b>Series</b><br>KMDT - Right Angle PCB Mount Mini-DIN                                                      |   |       |   |                    |   |              |   |                 |  |
| <b>Style</b><br>SMT - Surface Mount<br>HT - Reflow Compatible Through Hole<br>Blank - Standard Through Hole |   |       |   |                    |   |              |   |                 |  |
| <b>Number of Contacts</b><br>4 - 4 Contacts<br>6 - 6 Contacts                                               |   |       |   |                    |   |              |   |                 |  |
| <b>Contact Type</b><br>S - Receptacle                                                                       |   |       |   |                    |   |              |   |                 |  |

#### Plating Option

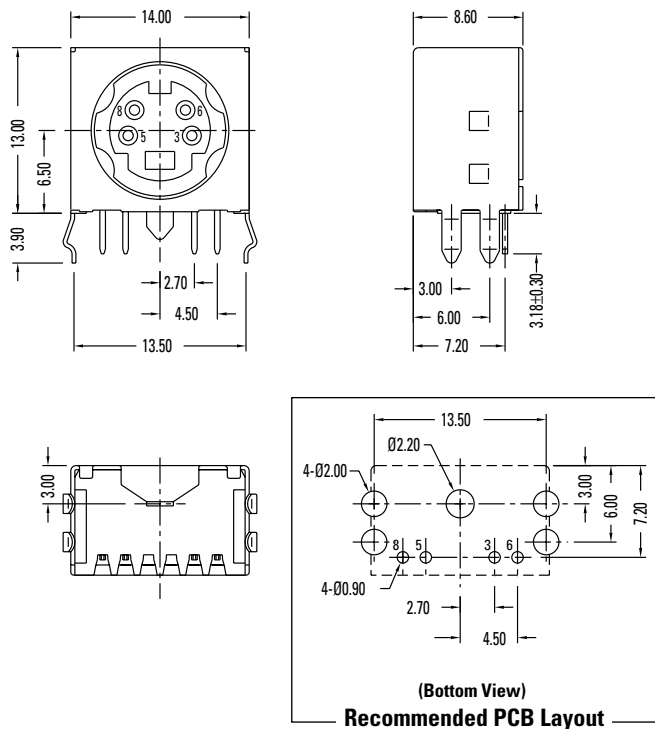
|          |                                                                                        |
|----------|----------------------------------------------------------------------------------------|
| Standard | Gold flash over nickel on contacts. Tin/lead over nickel on soldertails.               |
| 30       | 30µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.* |

\*Minimum Quantities May Apply

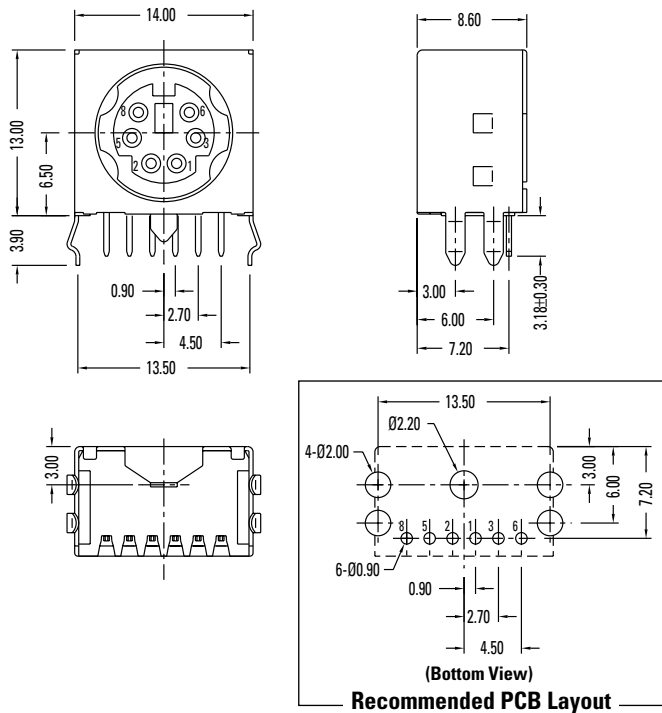
## KMDT Series Dimensions

Dimensions in mm

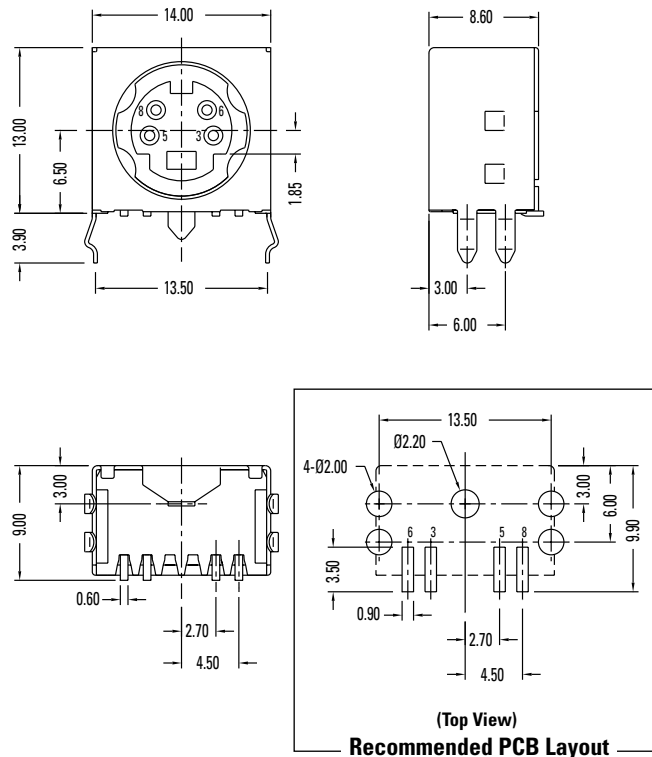
### KMDT-HT-4S-BSC



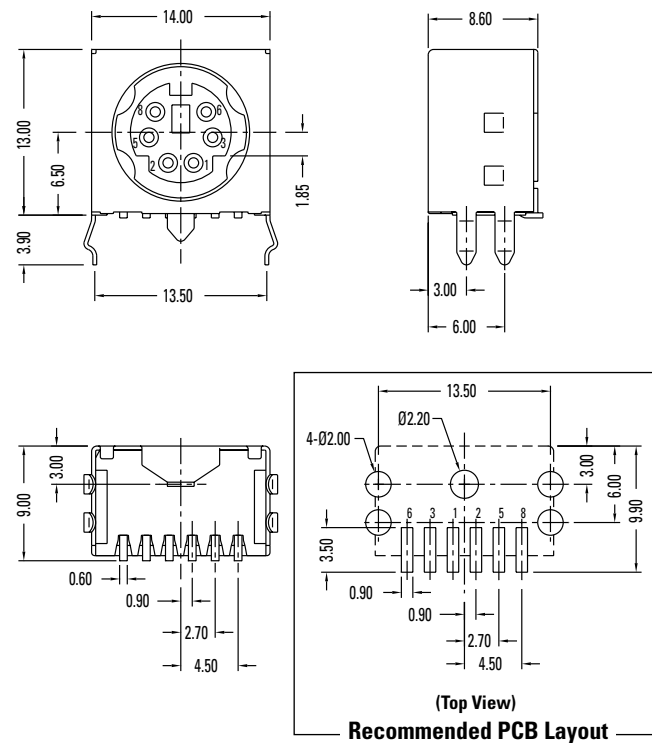
### KMDT-HT-6S-BSC

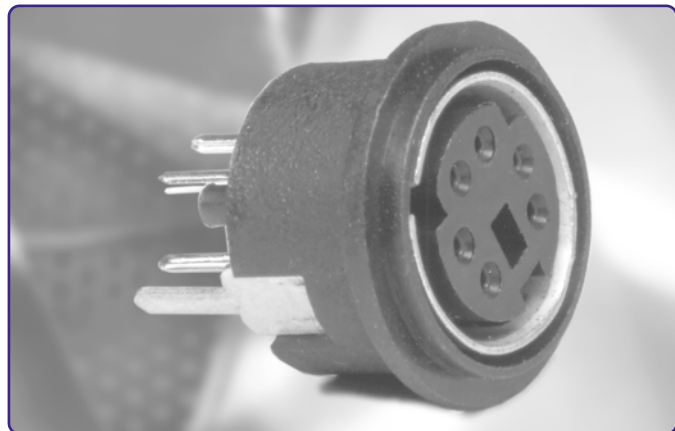


### KMDT-SMT-4S-BSC



### KMDT-SMT-6S-BSC





## KMDVL Series Snap and Lock Vertical Mini-DIN

### Features



- Audio, Video, Computer and Digital Equipment Applications
- Backward Compatible
- Mates With Standard and Snap and Lock Plugs
- Inner Shield for Good Conductivity, Grounding and EMI/RFI Protection
- Visual and Mechanical Polarization for Plug Insertion
- Closed Bottom for Better Solderability
- Various Circuit Sizes
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Body

PBT Thermoplastic, Black Color, UL94V-0 Rated

#### Contacts

Phosphor Bronze, Silver Plated

### Mechanical Characteristics

#### Insertion Force

0.5 kg - 4.5 kg

#### Extraction Force

0.4 kg - 3.5 kg

#### Durability

500 Cycles Minimum with Test Plug

## MINI-DINs / CIRCULAR DINs

### KMDVL Series

### Electrical Characteristics

#### Contact Current Rating

2 Amp Max. at 12V DC

#### Insulation Resistance

100 Megohms Min. at 250V

#### Contact Resistance

*Before Durability Test*

Plug to Shield: 50 Milliohms Max.

Plug to Terminals: 30 Milliohms Max

*After Durability Test*

Plug to Shield: 100 Milliohms Max

Plug to Terminals: 60 Milliohms Max.

#### Dielectric Withstanding Voltage

250V AC for 1 Minute

#### Operating Temperature

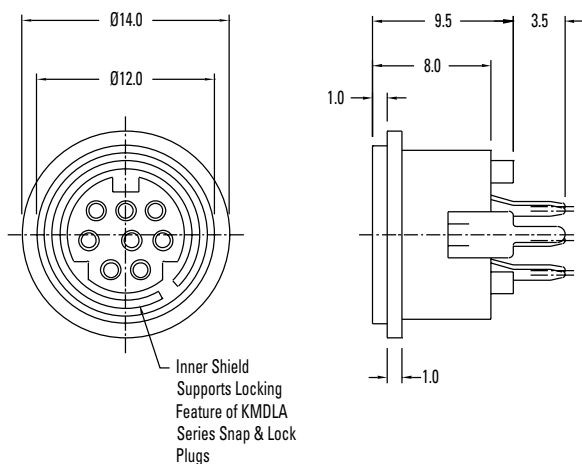
-25°C to +85°C

### Ordering Information

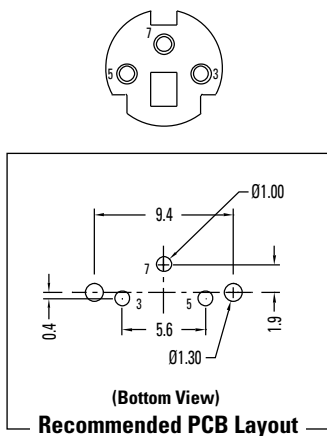
|                                                                      |   |                    |              |   |   |
|----------------------------------------------------------------------|---|--------------------|--------------|---|---|
| KMDVL                                                                | — | 6                  | S            | — | N |
| Series                                                               |   | Number of Contacts | Contact Type |   |   |
| <b>Series</b><br>KMDVL - Kycon Vertical PCB Mount Mini-DIN Connector |   |                    |              |   |   |
| <b>Number of Contacts</b><br>3, 4, 5, 6, 8                           |   |                    |              |   |   |
| <b>Contact Type</b><br>S - Receptacle                                |   |                    |              |   |   |

## KMDVL Series Dimensions

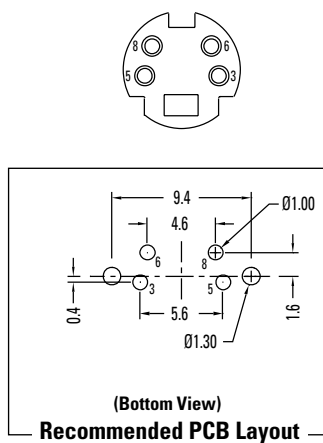
Dimensions in mm



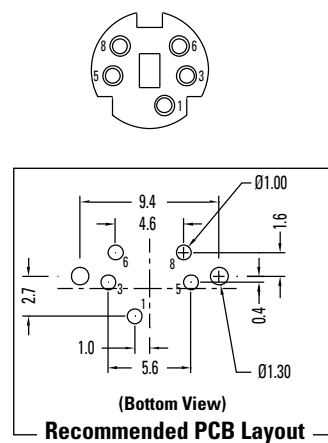
### KMDVL-3S-N



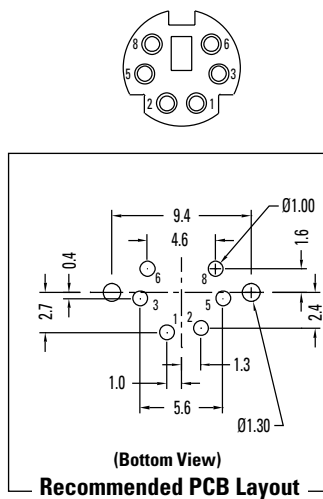
### KMDVL-4S-N



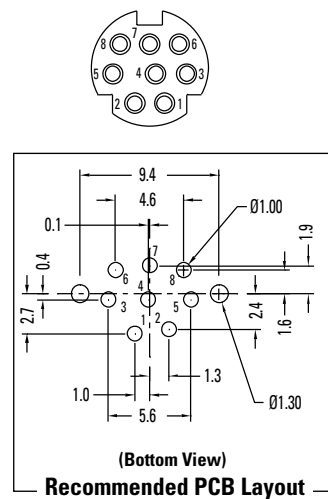
### KMDVL-5S-N



### KMDVL-6S-N



### KMDVL-8S-N





## KMDPL Series Panel Mount Mini-DIN

### Features



- Panel Mount
- Backward Compatible
- Mates with Standard and Snap and Lock Plugs
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Shell:** Steel, Tin Plated

**Contacts:** Phosphor Bronze, Tin Plated

**Insulation:** PBT Thermoplastic, Black Color, UL94V-0 Rated 

**Wire:** 100mm, Stripped and Tinned, 26 AWG

#### Electrical Characteristics

**Current Rating:** 12V DC 1 Amp Max.

**Insulation Resistance:** 50 Megohm Min. at 250V DC

**Dielectric Strength:** 250V AC for 1 Minute

**Contact Resistance:** 30 Milliohm Max.

**Operating Temperature:** -25°C to +85°C

### Ordering Information

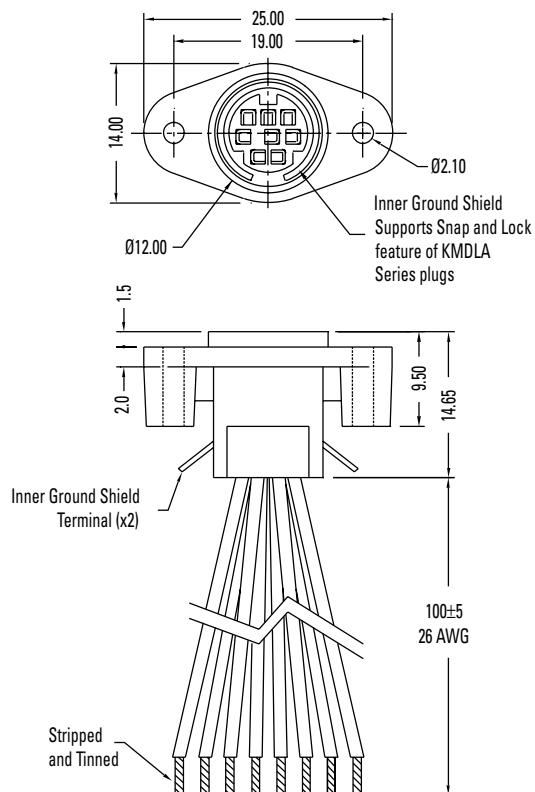
|                                                                                          |   |                    |              |   |             |
|------------------------------------------------------------------------------------------|---|--------------------|--------------|---|-------------|
| KMDPL                                                                                    | — | 4                  | S            | — | 100         |
| Series                                                                                   |   | Number of Contacts | Contact Type |   | Wire Length |
| <b>Series</b><br>KMDPL - Kycon Panel Mount Mini DIN                                      |   |                    |              |   |             |
| <b>Number of Contacts</b><br>3, 4, 5, 6, 8                                               |   |                    |              |   |             |
| <b>Gender</b><br>S - Receptacle                                                          |   |                    |              |   |             |
| <b>Wire Length</b><br>100 - Standard Length 100mm<br>Other Lengths Available (500pc min) |   |                    |              |   |             |

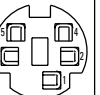
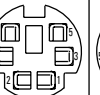
## MINI-DINs / CIRCULAR DINs

### KMDPL Series

### KMDPL Series Dimensions

Dimensions in mm



| Contact Configuration |  |  |  |  |  |
|-----------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| # of Contacts         | 3                                                                                    | 4                                                                                     | 5                                                                                     | 6                                                                                     | 8                                                                                     |
| Wire Color            | 1 Black<br>2 Green<br>3 Orange                                                       | 1 Black<br>2 Green<br>3 Yellow<br>4 Red                                               | 1 Brown<br>2 Black<br>3 Green<br>4 Yellow<br>5 Red                                    | 1 Brown<br>2 White<br>3 Black<br>4 Green<br>5 Yellow<br>6 Red                         | 1 Brown<br>2 White<br>3 Black<br>4 Blue<br>5 Green<br>6 Yellow<br>7 Orange<br>8 Red   |



## KMDLA Series Snap and Lock Cable Mount Plug



### Features

- Audio, Video, Lap Top Computer and Other Portable Digital Equipment Applications
- Snap and Lock Feature Helps Prevent Accidental Disconnects
- Supplied in Kits Ready for Assembly
- CSA/NRTL Certified File No. LR78160
- Gold Plating Available Upon Request

### Performance Specifications

#### Materials and Finish

**Insert:** PBT Thermoplastic, Black Color, UL94V-0 Rated

**Plastic Shell:** PVC, UL94V-0 Rated

**Contact:** Brass, Silver Plated

**Metal Shield:** Nickel Plated Steel

### Mechanical Characteristics

**Suggested Wire Gauge:** 26 - 30 Awg.

**Insertion Force:** 0.5kg Max.

**Extraction Force:** 1.0kg - 5.0kg

**Durability:** 1500 Cycles Minimum with Test Plug

### Electrical Characteristics

**Contact Current Rating:** 12V DC 2 Amp Max.

**Insulation Resistance:** 50 Megohms Min. at 250V DC

**Dielectric Withstanding Voltage:** 500V AC for 1 Minute

**Operating Temperature:** -25°C to +85°C

### Ordering Information

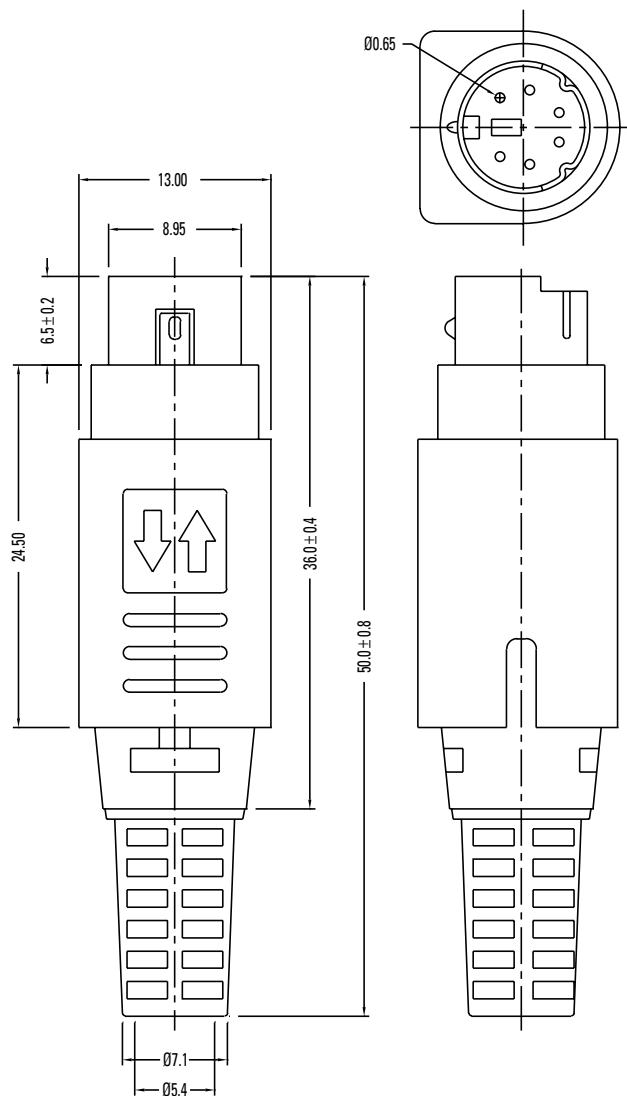
|                                  |   |                    |      |
|----------------------------------|---|--------------------|------|
| KMDLA                            | — | 4                  | P    |
| Series                           |   | Number of Contacts | Plug |
| <b>Series</b>                    |   |                    |      |
| KMDLA - Kycon Snap and Lock Plug |   |                    |      |
| <b>Number of Contacts</b>        |   |                    |      |
| 3, 4, 5, 6, 7, 8                 |   |                    |      |

## MINI-DINs / CIRCULAR DINs

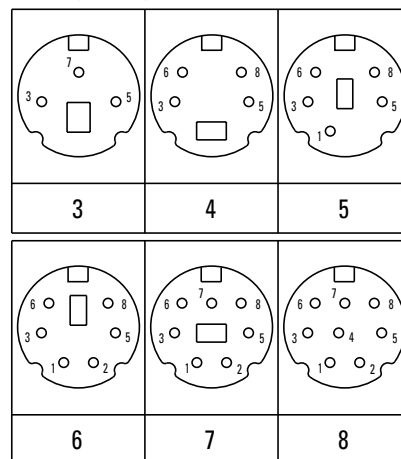
### KMDLA Series

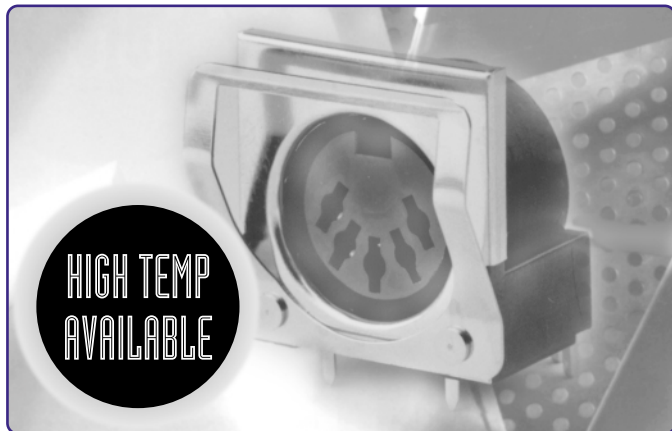
### KMDLA Series Dimensions

Dimensions in mm



Plug Configuration (KMDLA Series)





## KCD Series Right Angle PCB Mount

### Features



- Audio, Video, Computer and Digital Equipment Applications
- Designed to Meet European DIN Standards
- Nickel Shells for Good Conductivity, Grounding and EMI/RFI Shielding
- Available in Reflow Compatible Design
- Visual and Mechanical Polarization for Plug Insertion
- Various Circuit Sizes
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Material Finish



##### Body

KCD - PBT Thermoplastic, Black Color, UL94V-0 Rated  
KCDHT - High Temperature Thermoplastic, Black Color, UL94V-0 Rated

##### Contact

KCD - Brass, Tin Plated  
KCDHT - Brass, Silver Plated

##### Shield

Copper Alloy, Nickel Plated

### Mechanical Characteristics

#### Insertion Force

0.5kg - 7.0kg

#### Extraction Force

0.4kg - 7.0kg

#### Durability

500 Cycles Minimum With Test Plug

## MINI-DINs / CIRCULAR DINs

### KCD Series

### Electrical Characteristics

#### Contact Current Rating

Rated Voltage and Current: 20V DC, 2.0 A

#### Insulation Resistance

100 Megohms Min. at 250V DC Before and After Test

#### Contact Resistance

Pin to Contact Resistance: 60 Milliohms Max.

Plug Shield to Socket Resistance: 100 Milliohms Max.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Operating Temperature

-25°C to +85°C

### Ordering Information

|        |   |                       |   |                 |   |         |
|--------|---|-----------------------|---|-----------------|---|---------|
| KCD    | — | 5                     | — | S               | — | S       |
| Series |   | Number of<br>Contacts |   | Contact<br>Type |   | Options |

#### Series

KCD - Kycon Circular DIN Connectors,  
Right Angle PCB Mount, Receptacle  
KCDHT - Reflow Compatible Version

#### Number of Contacts

3, 5, 6, 7, 8

#### Contact Type

S - Receptacle

#### Options

N - Non-Shielded, 10mm Pitch

N2 - Non-Shielded, 5mm Pitch

S - Shielded, 10mm Pitch

S2 - Shielded, 5mm Pitch

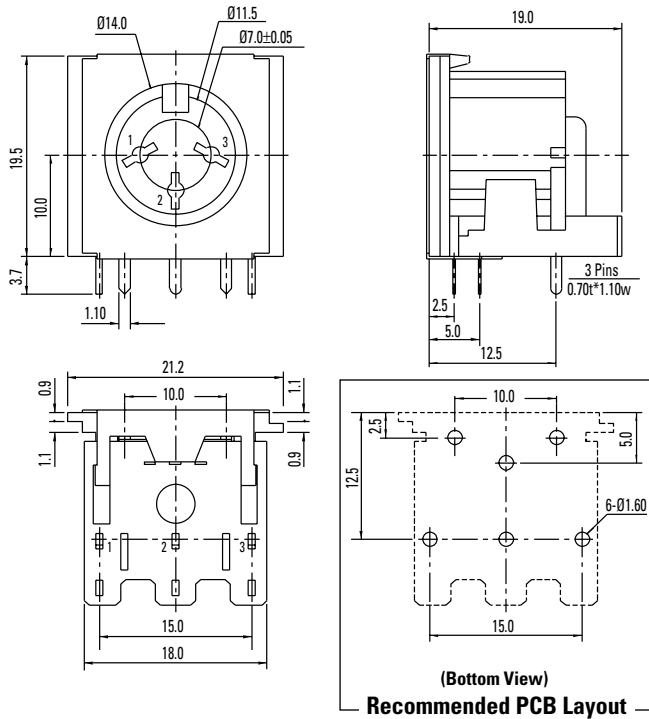
S-PS - Shielded, 10mm Pitch, with Grounding Spring Shield

S2-PS - Shielded, 5mm Pitch, with Grounding Spring Shield

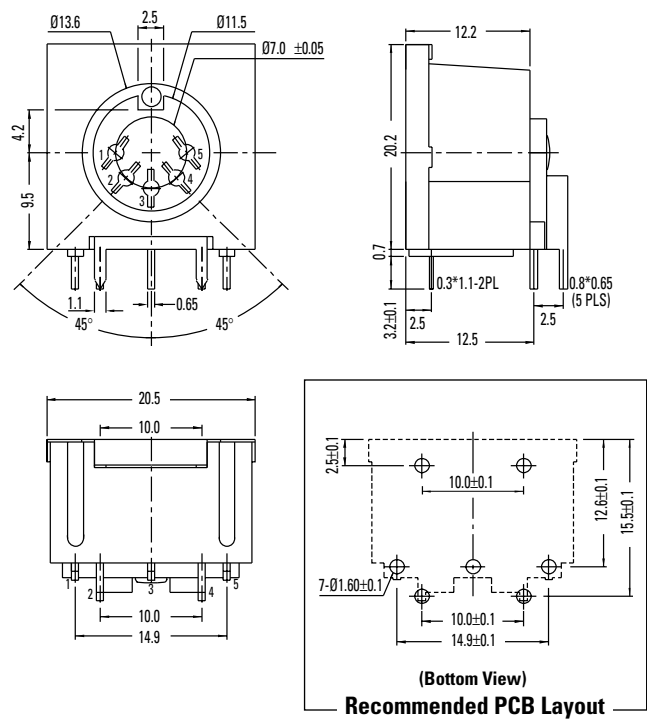
**KCD Series Dimensions\***

Dimensions in mm

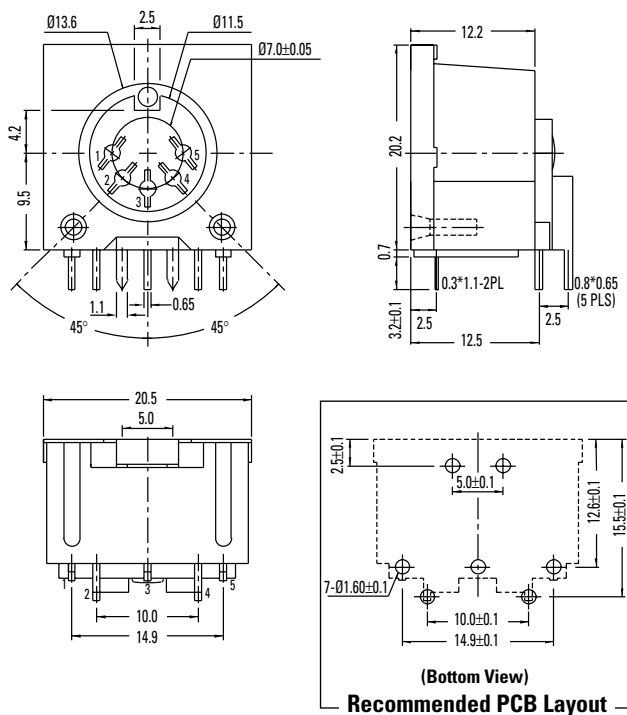
**KCD-3S-S**



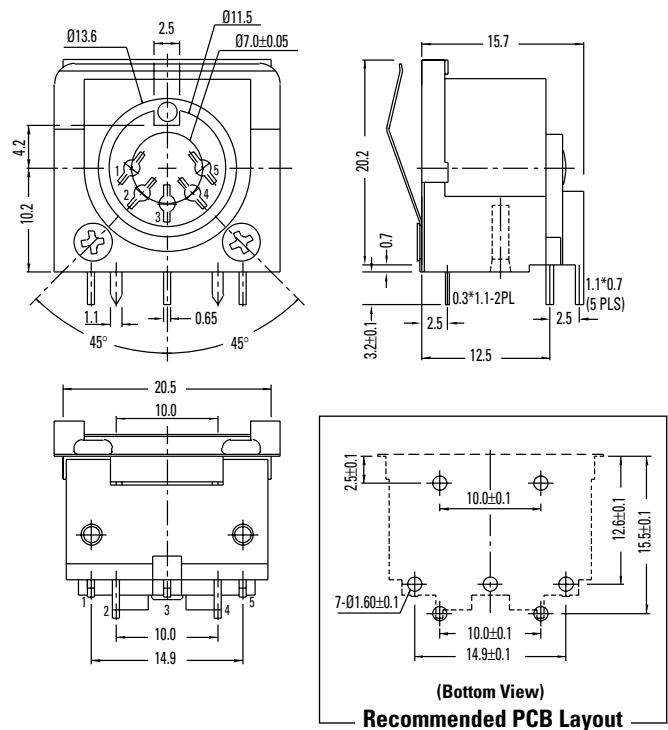
**KCD-5S-S**



**KCD-5S-S2**



**KCD-5S-S-PS**

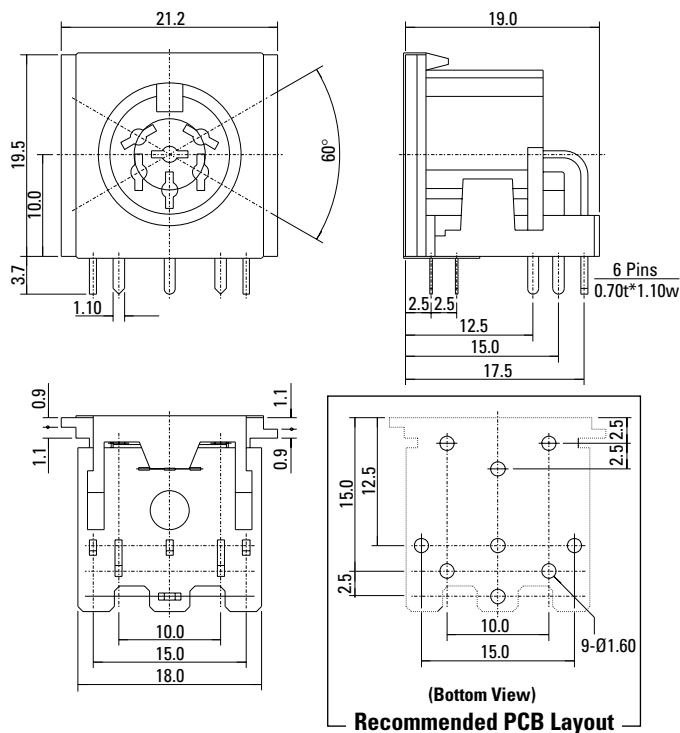


\* Contact factory for non-shielded specifications. 888-KYCON-22

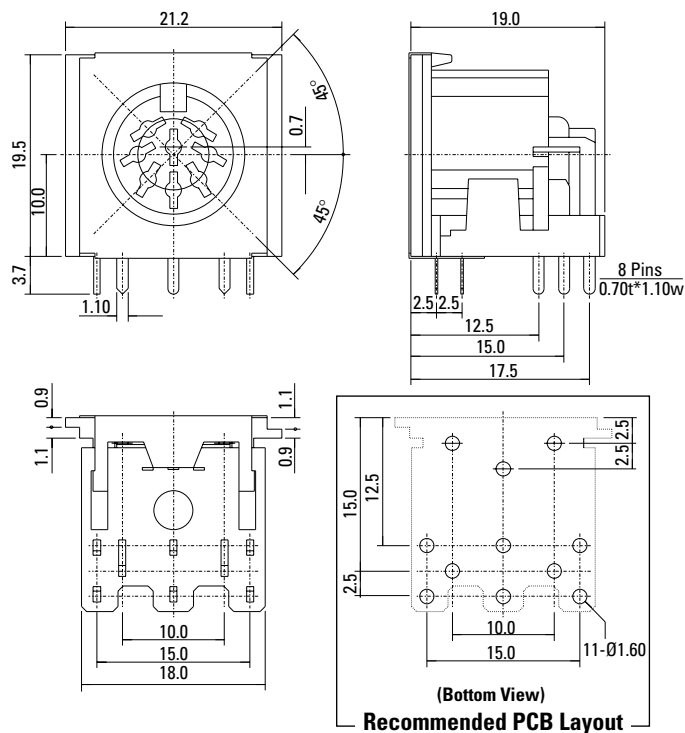
**KCD Series Dimensions\***

Dimensions in mm

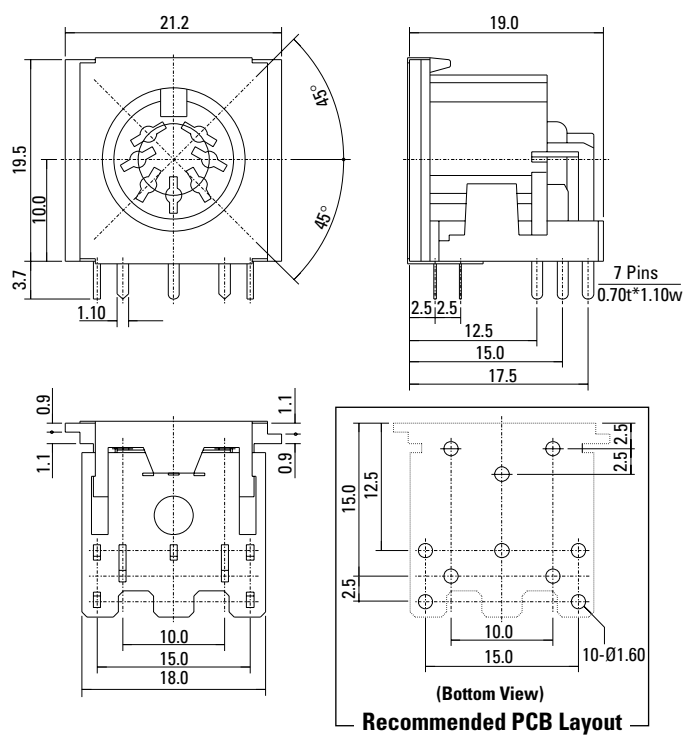
**KCD-6S-S**



**KCD-8S-S**



**KCD-7S-S**



\* Contact factory for non-shielded specifications. 888-KYCON-22

**KYCON continues its leadership in Audio Jacks by offering a complete line of designs and options.**

### Features:

- Audio Applications for Computers and Multimedia
- Available in Through Hole, Surface Mount, and Reflow Compatible
- Available Stacked
- Tape & Reel Packaging Available for Automated Assembly
- Stereo & Mono Available
- Various Switching Options Available
- Threaded Barrels Available for Panel Mounting
- PC99 Colors Available:  
Light Blue  
Lime  
Pink  
Orange



## AUDIO JACKS

### Directory

#### 2.5mm Audio Jacks

|                               |            |
|-------------------------------|------------|
| <b>ST-2000 - Through Hole</b> | <b>100</b> |
| <b>ST-2500 - SMT</b>          | <b>100</b> |
| <b>ST-2550 - SMT</b>          | <b>101</b> |



#### 3.5mm Audio Jacks

|                               |            |
|-------------------------------|------------|
| <b>ST-3000 - All Plastic</b>  | <b>102</b> |
| <b>ST-3500 - SMT</b>          | <b>103</b> |
| <b>ST-3081 - Low Profile</b>  | <b>104</b> |
| <b>ST-3100 - Metal Barrel</b> | <b>105</b> |
| <b>ST-3120 - All Plastic</b>  | <b>107</b> |
| <b>ST-3200 - Metal Barrel</b> | <b>108</b> |
| <b>ST-314/ST-315 - Slim</b>   | <b>110</b> |
| <b>ST-3900 - Metal Barrel</b> | <b>112</b> |
| <b>ST-4235 - Stacked</b>      | <b>113</b> |
| <b>STP-3501 - Panel Mount</b> | <b>115</b> |



#### RCA Phono Jacks

|                        |            |
|------------------------|------------|
| <b>KLP - Single</b>    | <b>116</b> |
| <b>KLP42 - Stacked</b> | <b>117</b> |



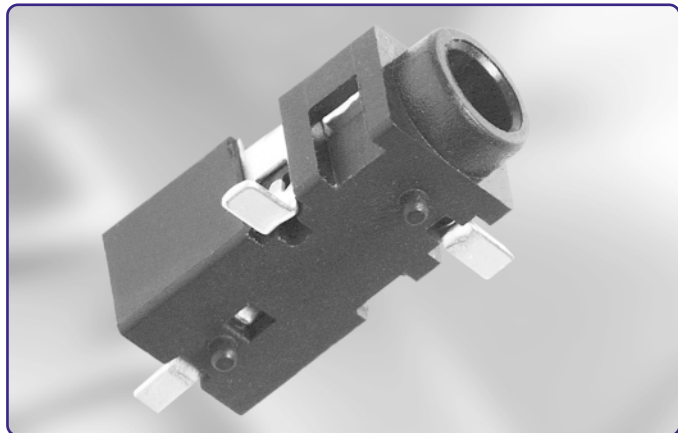
### Audio Jack Options:

| Series                      | ST - 2000 | ST - 2500 | ST - 2550 | ST - 3500 | ST - 3000 | ST - 3081 | ST - 3100 | ST - 3120 | ST - 3200 | ST - 314 | ST - 315 | ST - 3900 | ST - 4235 | STP- 3501 |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|
| 2.5mm                       | •         | •         | •         |           |           |           |           |           |           |          |          |           |           |           |
| 3.5mm                       |           |           |           | •         | •         | •         | •         | •         | •         | •        | •        | •         | •         | •         |
| Through Hole                | •         |           |           |           | •         | •         | •         | •         | •         | •        | •        | •         | •         |           |
| SMT                         |           | •         | •         | •         |           |           |           |           |           |          |          |           |           |           |
| Stacked                     |           |           |           |           |           |           |           |           |           |          |          |           | •         |           |
| Panel Mount                 |           |           |           |           |           | •         |           |           |           | •        | •        | •         |           | •         |
| All Plastic                 | •         | •         | •         | •         | •         |           |           | •         |           |          |          |           | •         |           |
| Threaded Option             |           |           |           |           |           | •         | •         |           | •         | •        | •        | •         |           | •         |
| Mono                        |           |           | •         |           |           |           |           | •         |           | •        | •        |           |           |           |
| 3 Position                  | •         | •         | •         | •         | •         | •         | •         | •         | •         | •        | •        | •         | •         | •         |
| 4 position (with switches)  |           | •         | •         | •         |           |           |           |           |           |          |          |           |           |           |
| 5 Position (with switches)  |           |           | •         | •         |           | •         | •         | •         | •         | •        |          |           | •         |           |
| 9 Position (with switches)  |           |           |           |           |           |           | •         |           |           |          |          |           | •         |           |
| 11 Position (with switches) |           |           |           |           |           |           | •         |           |           |          |          |           | •         |           |

### Audio Plug Options:

Kycon offers standard 2.5mm and 3.5mm molded cables in 8 foot lengths.  
Contact factory for details.

KYCON Tech Support: **1-888-KYCON-22**  
or E-mail: [sales@kycon.com](mailto:sales@kycon.com)



## ST-2000/ST-2500 Series 2.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Through Hole and Surface Mount Designs
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing

ST-2000: PBT Thermoplastic, Black Color UL94V-0 Rated  
ST-2500: High Temperature Thermoplastic, Black Color  
UL94V-0 Rated



##### Terminals

Copper Alloy, Silver over Nickel Plating

### Mechanical Characteristics

**Insertion Force:** 0.4kg - 3.0kg

**Extraction Force:** 0.3kg - 3.0kg

**Durability:** 5000 Mating Cycles

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

50 Milliohms Max.

*After Durability Test*

100 Milliohms Max.

**Insulation Resistance:** 100 Megohms Min. at 250V DC

**Dielectric Strength:** 250V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

## AUDIO JACKS

### ST-2000 / ST-2500 Series

### Ordering Information

|         |   |                |   |   |           |
|---------|---|----------------|---|---|-----------|
| ST-2500 | — | 3              | N | — |           |
| Series  |   | Number of Pins |   |   | Packaging |

#### Series

ST-2000 - 2.5mm Through Hole Audio Jack

ST-2500 - 2.5mm Surface Mount Audio Jack

#### Number of Pins

3 - 3 Pins

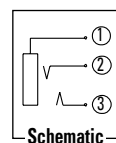
#### Packaging

Blank - Bulk

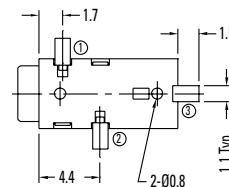
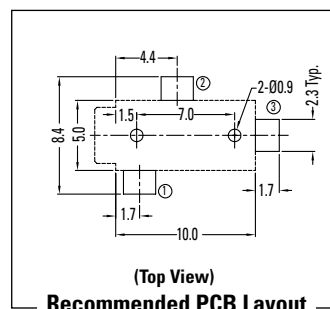
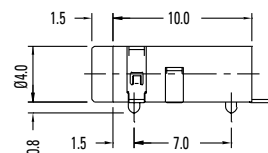
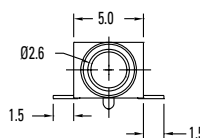
TR - Tape and Reel (ST-2500 only)

### Dimensions

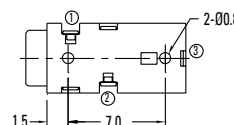
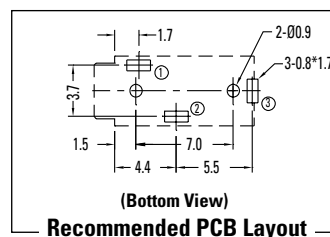
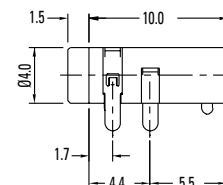
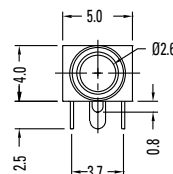
Dimensions in mm

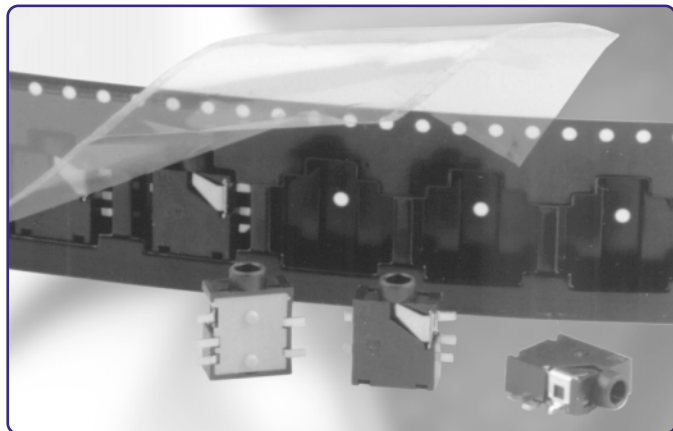


#### ST-2500-3N



#### ST-2000-3N





## ST-2550 Series Surface Mount 2.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Surface Mount Design
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing

High Temperature Thermoplastic, Black Color UL94V-0 Rated



##### Terminals

Copper Alloy, Gold Flash over Nickel Plating

### Mechanical Characteristics

**Insertion Force:** 0.4kg - 2.0kg

**Extraction Force:** 0.3kg - 2.0kg

**Durability:** 5000 Mating Cycles

### Electrical Characteristics

#### Contact Resistance

Before Durability Test

30 Milliohms Max.

After Durability Test

60 Milliohms Max.

**Insulation Resistance:** 100 Megohms Min. at 250V DC

**Dielectric Strength:** 500V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

## AUDIO JACKS

### ST-2550 Series

### Ordering Information

|         |   |                |   |             |           |
|---------|---|----------------|---|-------------|-----------|
| ST-2550 | - | 3              | N | -           | TR        |
| Series  |   | Number of Pins |   | Mono/Stereo | Packaging |

#### Series

ST-2550 - 2.5mm Surface Mount Audio Jack

#### Number of Pins

3 - 3 Pins

4 - 4 Pins

5 - 5 Pins

#### Mono/Stereo (3 Pin Only)

Blank - Stereo

M - Mono

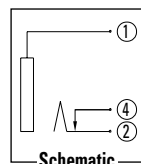
#### Packaging

TR - Tape and Reel

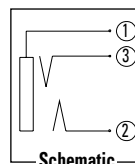
### Dimensions

Dimensions in mm

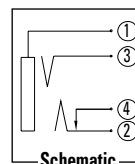
ST-2550-3NM



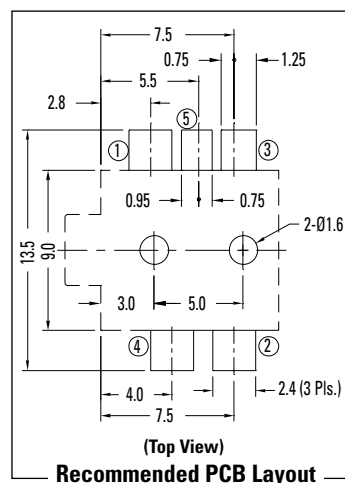
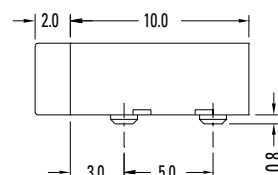
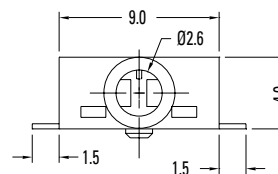
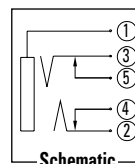
ST-2550-3N



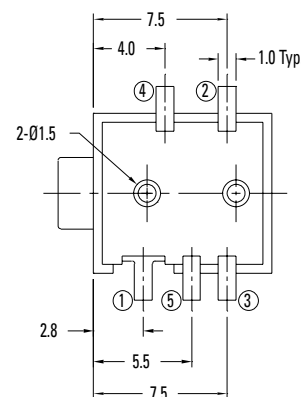
ST-2550-4N

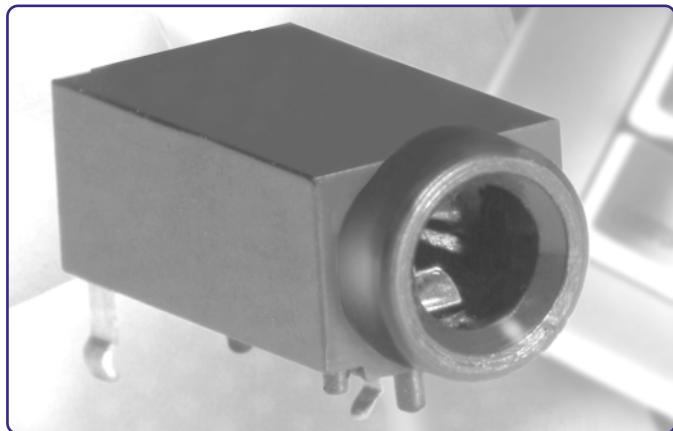


ST-2550-5N



(Top View)  
Recommended PCB Layout





## ST-3000 Series 3.5mm Audio Jack All Plastic PCB Mount

### Features



- Audio Applications for Computers and Multimedia
- All Plastic
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Plastic Housing

Black Thermoplastic, UL94V-0 Rated



#### Terminals

Copper Alloy, Tin over Nickel Plating

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-3000 Series

### Electrical Characteristics

#### Contact Resistance

Before Durability Test

30 Milliohms Max.

After Durability Test

60 Milliohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Strength

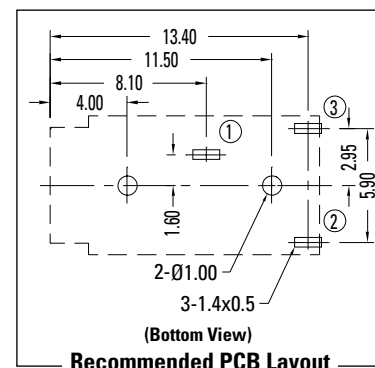
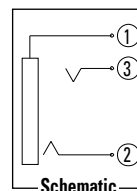
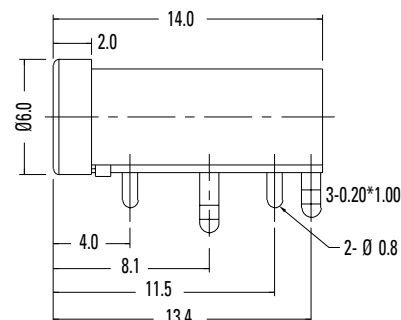
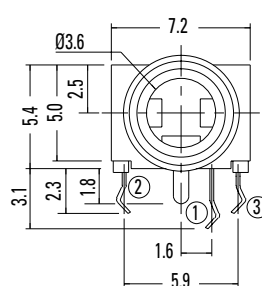
500V AC for 1 Minute

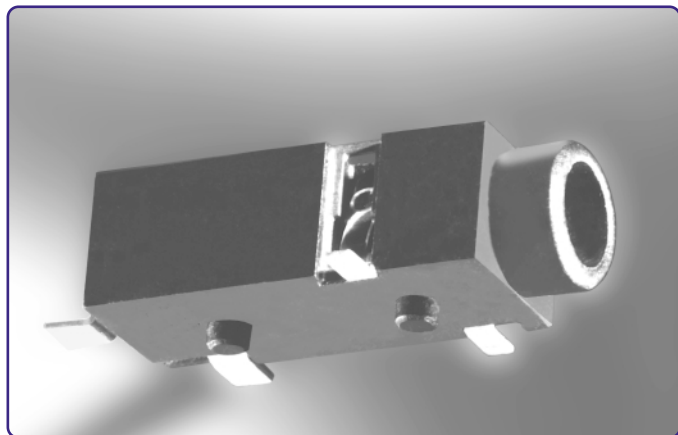
#### Operating Temperature

-25°C to +80°C

### ST-3000 Dimensions

Dimensions in mm





## ST-3500 Series Surface Mount 3.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Surface Mount Design
- All Plastic
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Housing:** High Temperature Thermoplastic, Black Color  
UL94V-0 Rated

**Terminals:** Copper Alloy, Silver over Nickel Plating

### Mechanical Characteristics

**Insertion Force:** 3.0kg Max.

**Extraction Force:** 0.2kg Min.

**Durability:** 5000 Mating Cycles

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

50 Milliohms Max.

*After Durability Test*

100 Milliohms Max.

**Rated Voltage:** 16 V DC

**Rated Current:** 0.3 A

**Insulation Resistance:** 100 Megohms Min. at 500V DC

**Dielectric Strength:** 500V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

## AUDIO JACKS

### ST-3500 Series

### Ordering Information

|         |   |                |   |   |           |
|---------|---|----------------|---|---|-----------|
| ST-3500 | - | 3              | N | - | TR        |
| Series  |   | Number of Pins |   |   | Packaging |

#### Series

ST-3500 - 3.5mm Surface Mount Audio Jack

#### Number of Pins

3 - 3 Pins

4 - 4 Pins

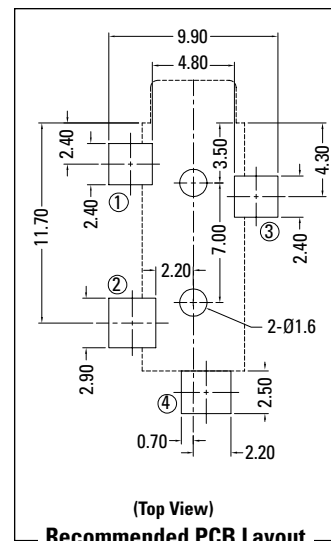
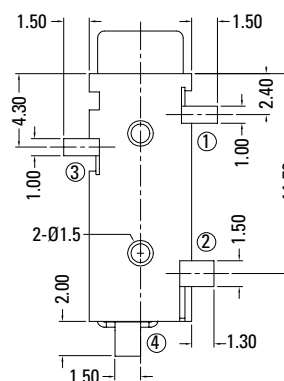
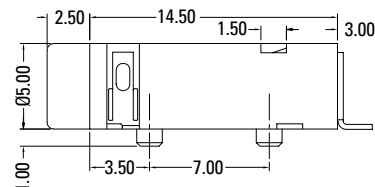
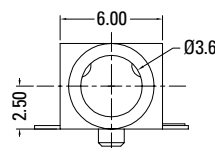
#### Packaging

Blank - Bulk

TR - Tape and Reel

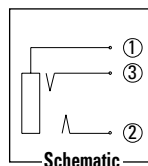
### Dimensions

Dimensions in mm

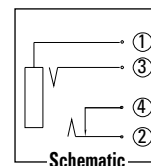


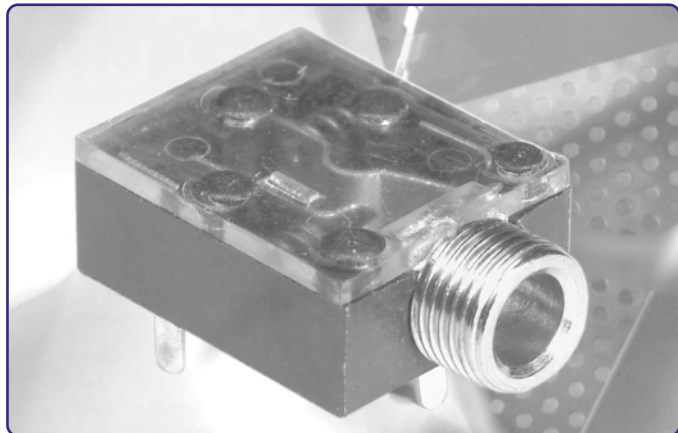
(Top View)  
Recommended PCB Layout

#### ST-3500-3N



#### ST-3500-4N





## ST-3081 Series PCB Mount 3.5mm Low Profile Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Low Profile
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Plastic Housing:** PBT Thermoplastic 15% Glass Filled, Black, UL94V-0 Rated

**Terminals:** Copper Alloy, Tin over Nickel Plating

### Mechanical Characteristics

**Insertion Force:** 0.4kg - 3.0kg

**Extraction Force:** 0.3kg - 3.0kg

**Durability:** 5000 Mating Cycles

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test: 30 Milliohms Max.*

*After Durability Test: 60 Milliohms Max.*

**Insulation Resistance:** 100 Megohms Min. at 500V DC

**Dielectric Strength:** 500V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

### Ordering Information

|                                  |   |                |                   |
|----------------------------------|---|----------------|-------------------|
| ST-3081                          | - | 5              | N                 |
| Series                           |   | Number of Pins | Threading Options |
| <b>Series</b>                    |   |                |                   |
| ST-3081 - Low Profile Audio Jack |   |                |                   |
| <b>Number of Pins</b>            |   |                |                   |
| 3, 5                             |   |                |                   |
| <b>Threading Options</b>         |   |                |                   |
| N - Non Threaded                 |   |                |                   |
| C - Threaded                     |   |                |                   |

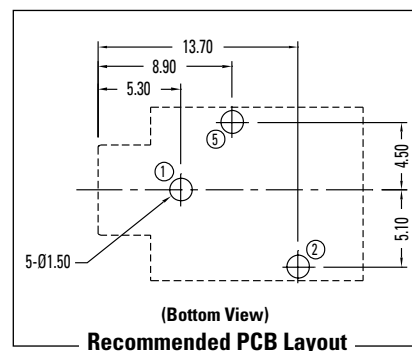
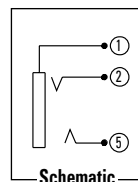
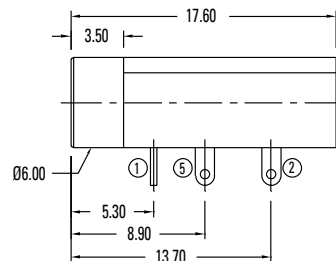
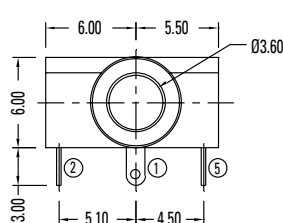
## AUDIO JACKS

### ST-3081 Series

### ST-3081 Series Dimensions

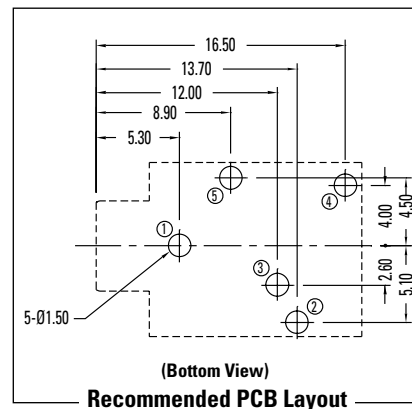
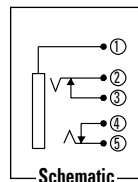
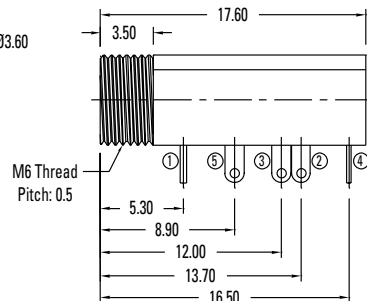
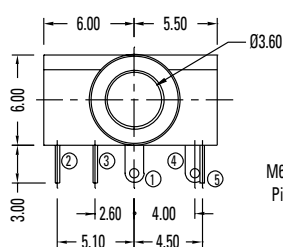
Dimensions in mm

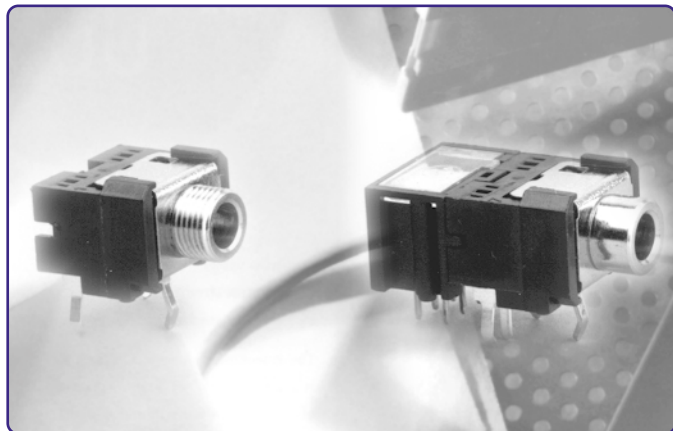
#### ST-3081-3N



#### ST-3081-5C

### One Single Throw, Double Pole Switch





## ST-3100 Series PCB Mount 3.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Can Be Used To Activate Speakers, an Equalizer or to Configure the Audio Signal
- Available with Up to One Double-Pole Single-Throw Switch and One Double-Pole Double-Throw Switch in One Audio Jack
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Audio Jack

Plastic Housing: PBT Thermoplastic, Black Color UL94V-0 Rated

Bushing: Copper Alloy, Nickel Plated

Sleeve: SPCC, Nickel Plated

Sleeve Spring: Phosphor Bronze

TIP and Ring: P.B.S., Tin Plated

N.C. Terminals: Copper Alloy, Tin Plated



##### Switch

Housing: PBT Thermoplastic, Black Color, UL94V-0 Rated

Clip Housing: Polyacetal

Cover: PC/PBT

Terminals: Brass Silver Plated

Clip: P.B.S.

Switch Spring: SWP Steel

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0 kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-3100 Series

### Electrical Characteristics

#### Contact Rating

DC 16V at 0.3 Amps

#### Contact Resistance

Before Durability Test

To Terminals: 30 Milliohms Max.

To Sleeve: 50 Milliohms Max.

After Durability Test

To Terminals: 60 Milliohms Max.

To Sleeve: 100 Milliohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Strength

500V AC for 1 Minute

#### Operating Temperature

-25°C to +80°C

### Ordering Information

|         |   |                |                  |                    |
|---------|---|----------------|------------------|--------------------|
| ST-3100 | — | 3              | N                | B                  |
| Series  |   | Number of Pins | Threading Option | Back Plate Options |

#### Series

ST-3100 - 3.5mm Audio Jacks

#### Number of Pins

3 - 3 Pins - Audio Jack, No Switch

5 - 5 Pins - One Double-Pole Single-Throw Switch

9 - 9 Pins - One Double-Pole Double-Throw Switch

11 - 11 Pins - One Double-Pole Single-Throw Switch/One Double-Pole Double-Throw Switch

#### Threading Option

C - Threaded

N - Non Threaded

#### Back Plate Option (3 & 5 pin only)

Blank - No Back Plate

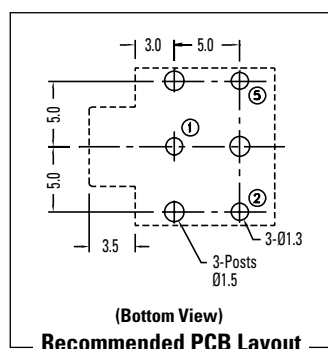
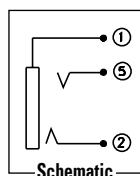
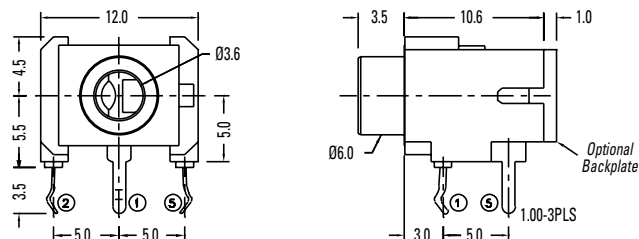
B - With Back Plate

### ST-3100 Series Dimensions

Dimensions in mm

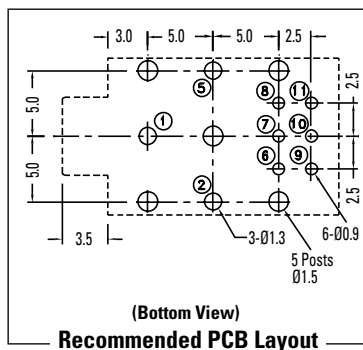
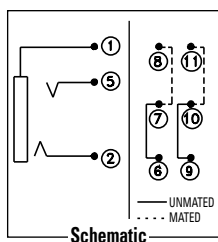
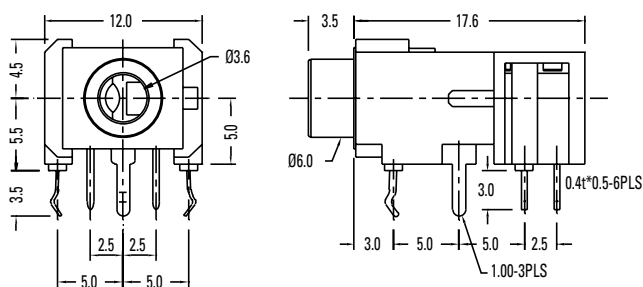
#### ST-3100-3N

(3 Pins, Non-Threaded)



#### ST-3100-9N

(9 Pins, Non-Threaded)

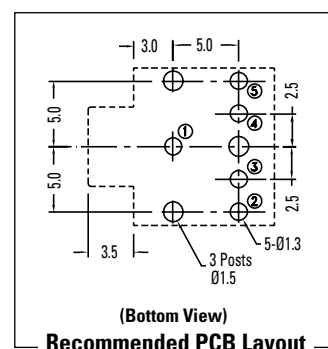
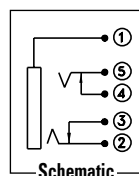
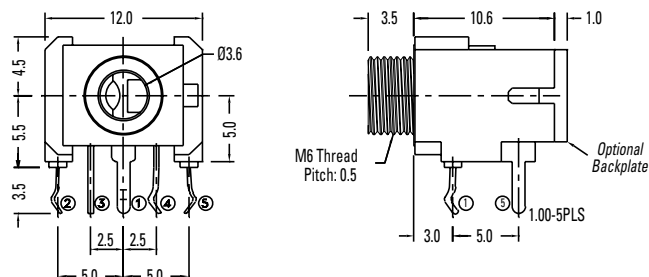


### ST-3100 Series Dimensions

Dimensions in mm

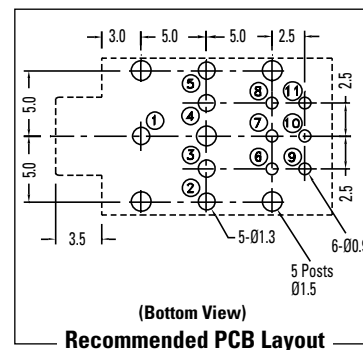
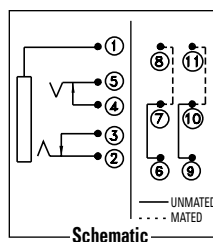
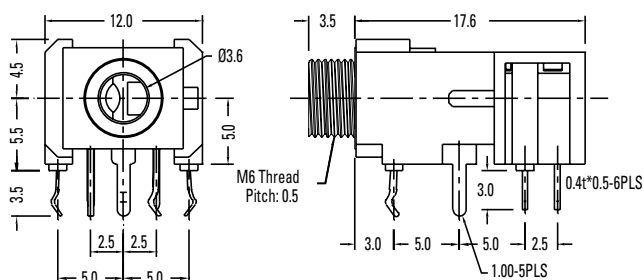
#### ST-3100-5C

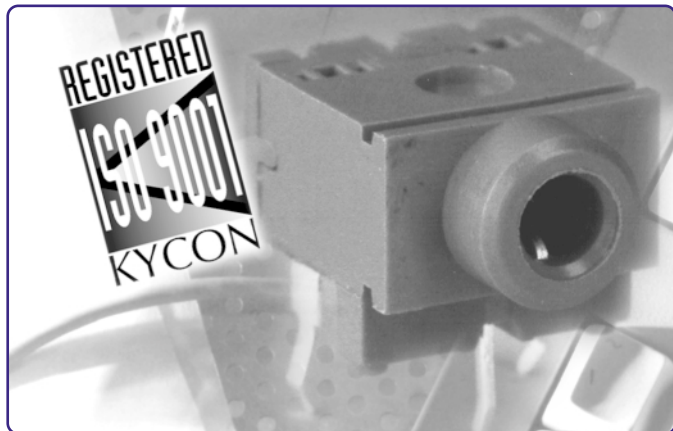
(5 Pins, Threaded)



#### ST-3100-11C

(11 Pins, Threaded)





## ST-3120 Series 3.5mm Audio Jack All Plastic PCB Mount

### Features



- Audio Applications for Computers and Multimedia
- Can Be Used To Activate Speakers, an Equalizer or to Configure the Audio Signal
- Available with One Double-Pole Single-Throw Switch
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Plastic Housing

PBT Thermoplastic, UL94V-0 Rated, Black Color  
(Other Colors Available)



##### Terminals

Copper Alloy, Tin over Nickel Plating

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-3120 Series

### Electrical Characteristics

#### Contact Resistance

Before Durability Test

50 Milliohms Max.

After Durability Test

100 Milliohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Strength

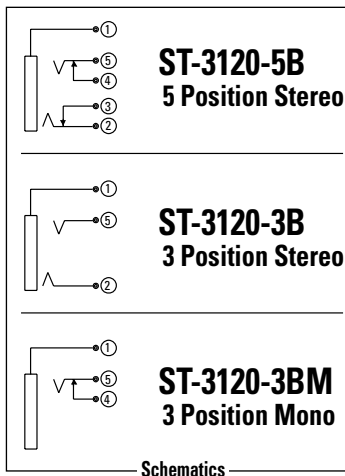
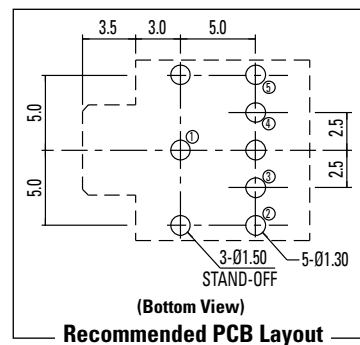
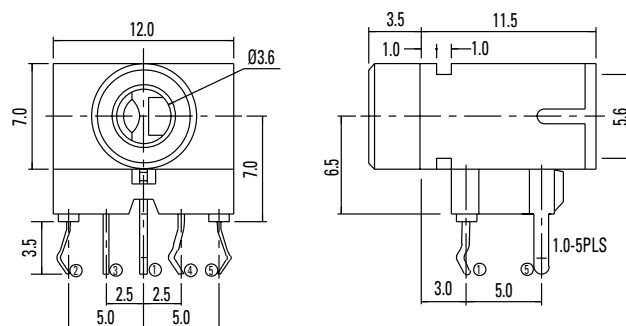
500V AC for 1 Minute

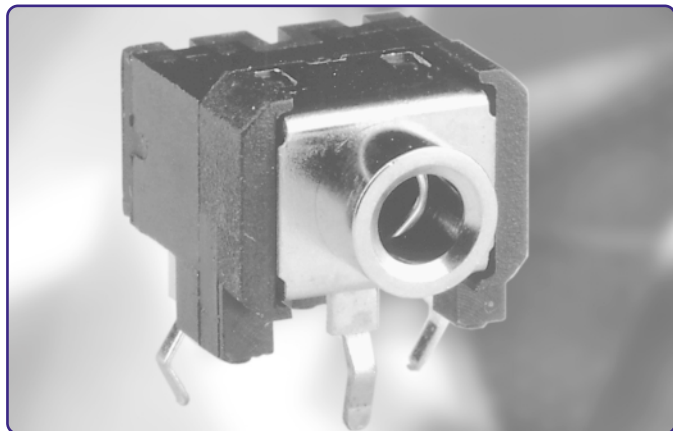
#### Operating Temperature

-25°C to +80°C

### ST-3120 Series Dimensions

Dimensions in mm





## ST-3200 Series PCB Mount 3.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Available with Threaded or Non-Threaded Metal Bushing
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Plastic Housing

PBT Thermoplastic, Black Color, UL94V-0 Rated



##### Terminals

Copper Alloy, Tin over Copper Plating

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-3200 Series

### Electrical Characteristics

#### Contact Resistance

Before Durability Test

30 Milliohms Max.

After Durability Test

60 Milliohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Strength

500V AC for 1 Minute

#### Operating Temperature

-25°C to +80°C

### Ordering Information

|         |   |                      |                     |                          |
|---------|---|----------------------|---------------------|--------------------------|
| ST-3200 | — | 5                    | N                   | B                        |
| Series  |   | Number<br>of<br>Pins | Threading<br>Option | Back<br>Plate<br>Options |

#### Series

ST-3200 - Kycon 3.5mm Audio Jack

#### Number of Pins

3 - 3 Pins

5 - 5 Pins

#### Threading Option

N - Non-Threaded

C - Threaded

#### Back Plate Option

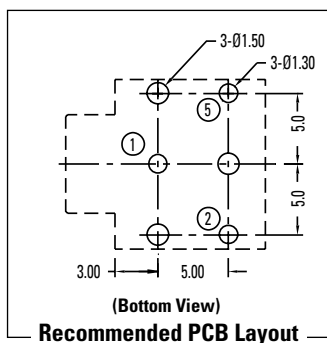
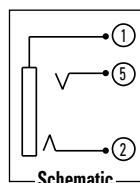
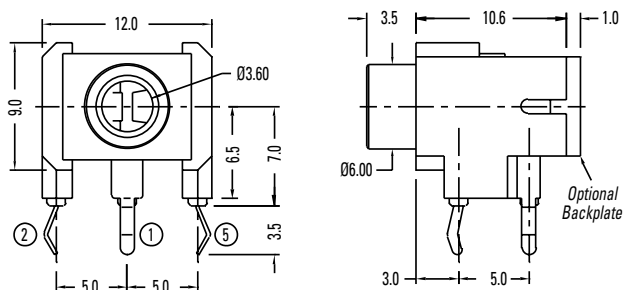
Blank - No Back Plate

B - With Back Plate

**ST-3200 Series Dimensions**

Dimensions in mm

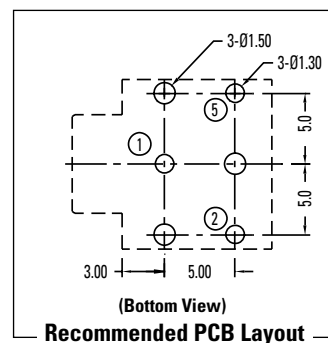
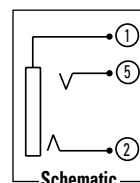
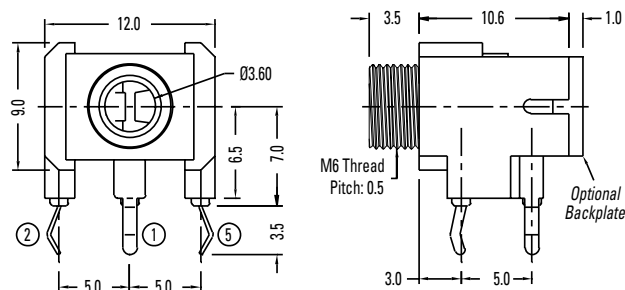
**ST-3200-3NB**



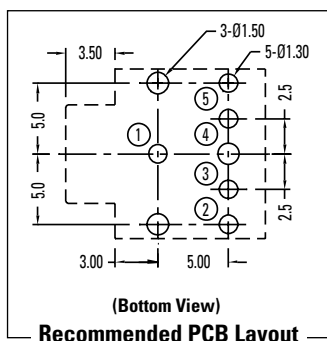
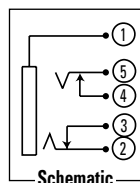
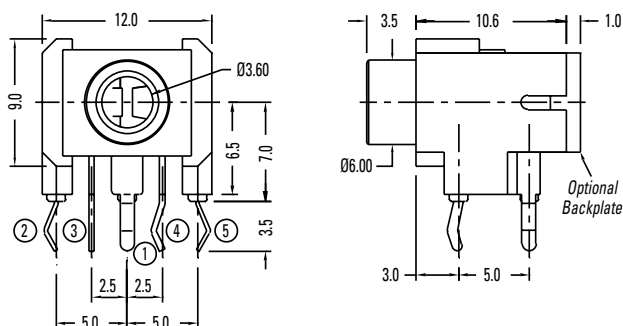
**ST-3200 Series Dimensions**

Dimensions in mm

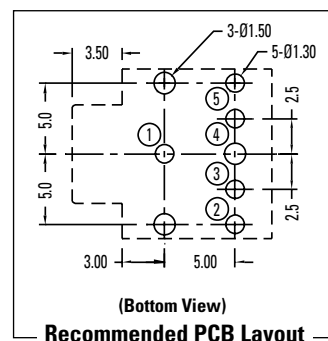
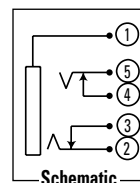
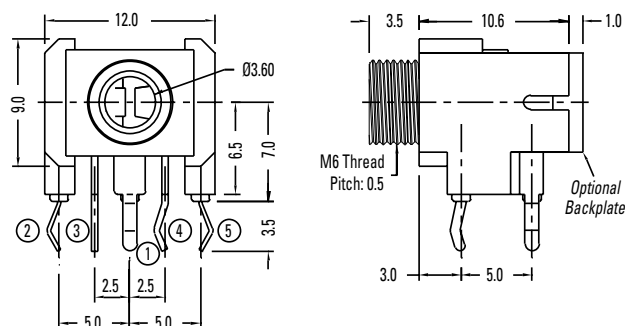
**ST-3200-3CB**

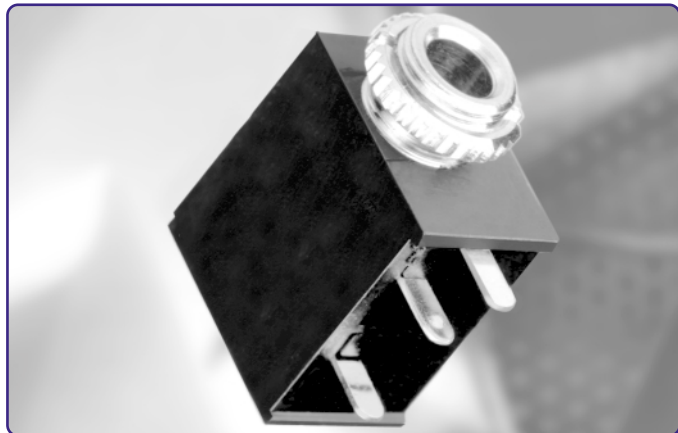


**ST-3200-5NB**



**ST-3200-5CB**





## ST-314/ST-315 Series PCB Mount 3.5mm Jack Slim Design with Switch

### Features



- Audio Applications for Computers and Multimedia
- Can be Used to Activate Speakers, an Equalizer or to Configure the Audio Signal
- Up to One Double-Pole Single-Throw Switch
- Spring Loaded Contacts for High Contact Reliability
- Narrow Body Uses Minimal Board Space
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Audio Jack



Housing: PBT Thermoplastic, Black Color, UL94V-0 Rated  
Cover: PBT Thermoplastic, UL94V-0 Rated  
Bushing: Brass, Nickel Plated  
Terminals and Contacts: Phosphor Bronze, Tin Plated  
Coil Springs: Spring Steel

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-314 / ST-315 Series

### Electrical Characteristics

#### Contact Rating

DC 16V at 0.3 Amps

#### Contact Resistance

##### Before Durability Test

To Terminals: 30 Milliohms Max.

To Sleeve: 50 Milliohms Max.

##### After Durability Test with Mating Plug

To Terminals: 60 Milliohms Max.

To Sleeve: 100 Milliohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Strength

500V AC for 1 Minute

#### Temperature Rating

Operating Temperature: -25°C to +80°C

### Ordering Information

|         |   |                |         |
|---------|---|----------------|---------|
| ST-3140 | — | 3              | N       |
| Series  |   | Number of Pins | Options |

#### Series

ST-3140 - Crimped Leads, Black Cover

ST-3141 - Crimped Leads, Clear Cover

ST-3150 - Straight Leads, Black Cover

ST-3151 - Straight Leads, Clear Cover

#### Number of Pins

3 - 3 Pins

5 - 5 Pins

#### Options

C - Threaded Barrel

N - Non-Threaded Barrel

CM - Threaded Barrel, Mono

NM - Non-Threaded Barrel, Mono

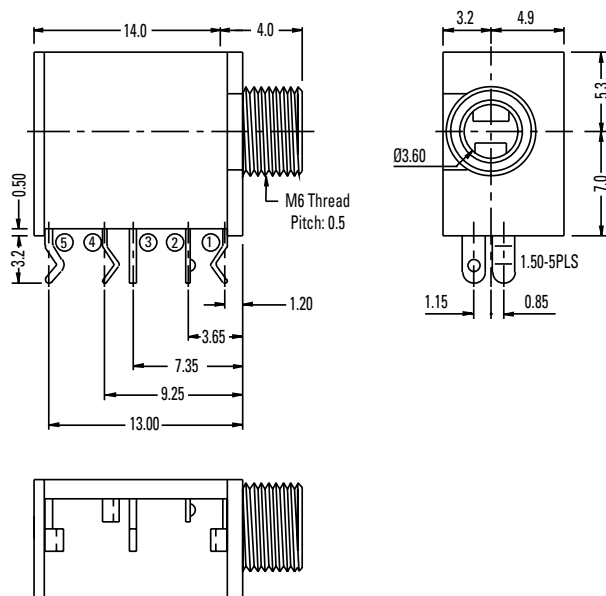
## ST-314 and ST-315 Series Dimensions

Dimensions in mm

### ST-3140 (Black Side Cover)

### ST-3141 (Clear Side Cover)

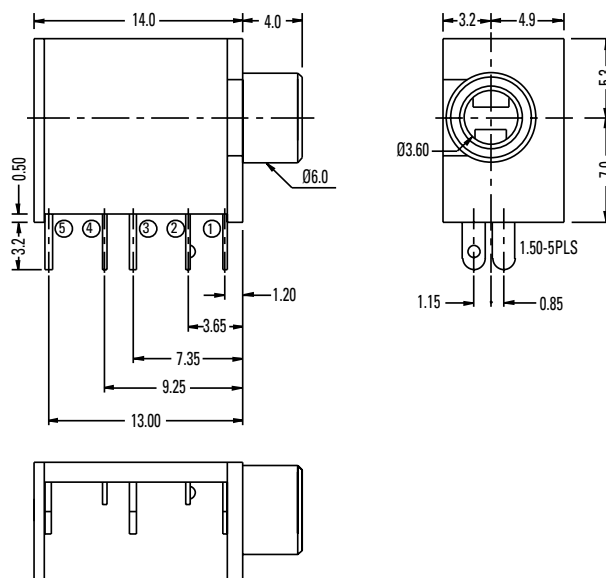
Crimped Leads (shown with Threaded Bushing)



### ST-3150 (Black Side Cover)

### ST-3151 (Clear Side Cover)

Straight Leads (shown with Non-Threaded Bushing)



## AUDIO JACKS

### ST-314 / ST-315 Series

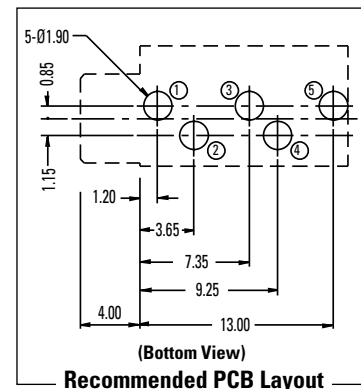
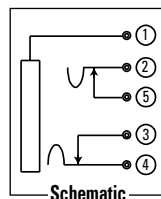
## ST-314 and ST-315 Series Dimensions

Dimensions in mm

### -5C and -5N Options

5 Pins

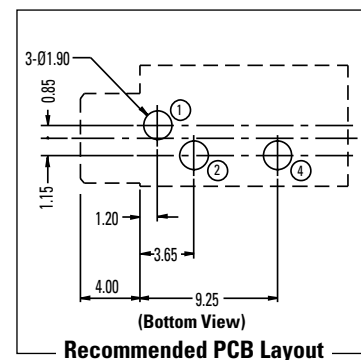
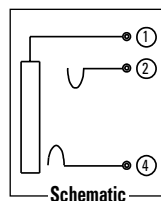
One Double-Pole, Single-Throw Switch



### -3C and -3N Options

3 Pins

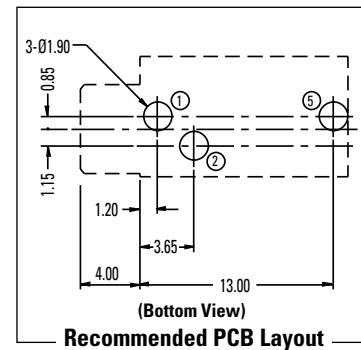
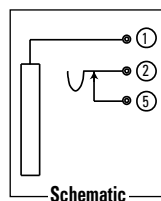
Audio Jack

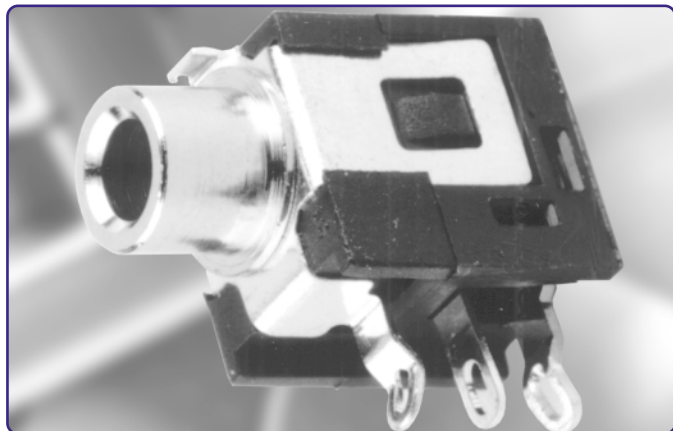


### -3CM and -3NM Options

3 Pins, Mono

One Single-Pole, Single-Throw Switch





## ST-3900 Series PCB Mount 3.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Available with Threaded or Non-Threaded Metal Bushing
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing

PBT Thermoplastic, Black Color UL94V-0 Rated 

##### Terminals

Copper Alloy, Tin over Nickel Plating

### Mechanical Characteristics

**Insertion Force:** 0.4kg - 3.0kg

**Extraction Force:** 0.3kg - 3.0kg

**Durability:** 5000 Mating Cycles

### Electrical Characteristics

#### Contact Resistance

Before Durability Test

50 Milliohms Max.

After Durability Test

100 Milliohms Max.

**Insulation Resistance:** 100 Megohms Min. at 500V DC

**Dielectric Strength:** 500V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

## AUDIO JACKS

### ST-3900 Series

### Ordering Information

|         |   |                |                  |            |
|---------|---|----------------|------------------|------------|
| ST-3900 | - | 3              | N                | P          |
| Series  |   | Number of Pins | Threading Option | Panel Stop |

#### Series

ST-3900 - 3.5mm Audio Jack

#### Number of Pins

3 - 3 Pins

#### Threading Option

C - Threaded

N - Non Threaded

#### Panel Stop Option

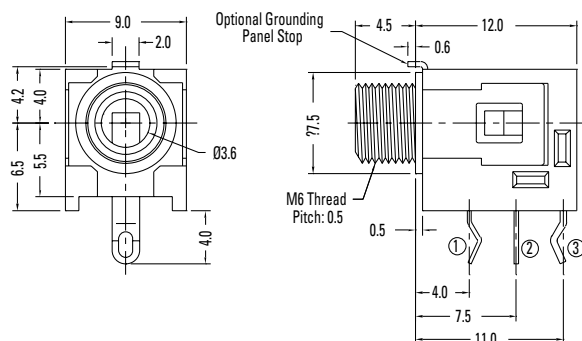
Blank - No Panel Stop

P - With Panel Stop

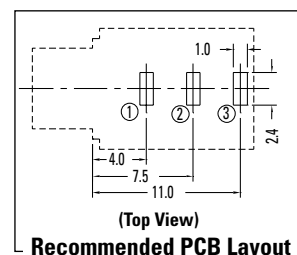
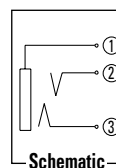
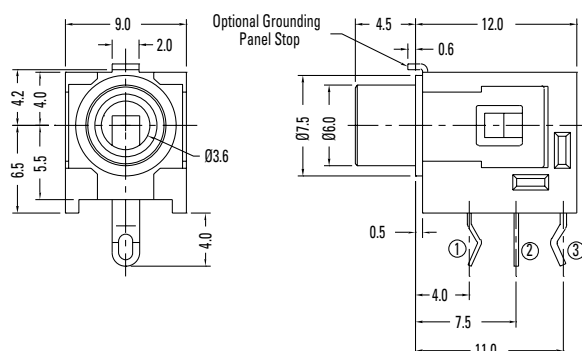
### Dimensions

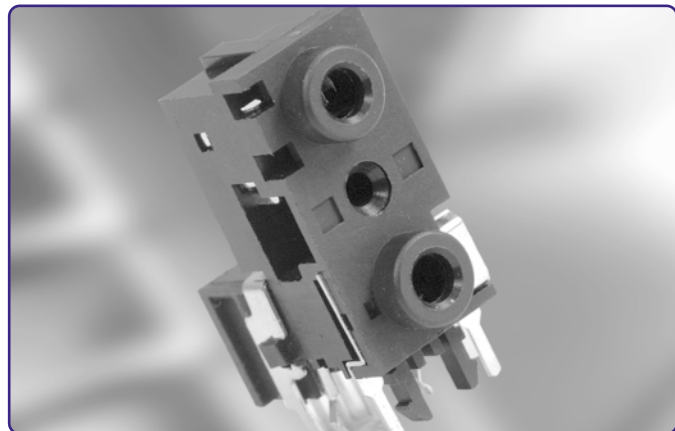
Dimensions in mm

#### ST-3900-3CP



#### ST-3900-3NP





## ST-4235 Series Stacked 3.5mm Audio Jack

### Features



- Audio Applications for Computers and Multimedia
- Can Be Used To Activate Speakers, an Equalizer or to Configure the Audio Signal
- Stacked Design Saves on Horizontal Board Space
- Multiple Switching Options Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing

Nylon 66 Thermoplastic, 15% Glass Filled, Black Color,  
UL94V-0 Rated



##### Terminals

Copper Alloy, Tin over Nickel Plating

##### Switch Housing

PBT Thermoplastic

##### Switch Slide Knob

POM

##### Switch Terminals

Copper Alloy, Silver Plated

### Mechanical Characteristics

#### Insertion Force

0.4kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

## AUDIO JACKS

### ST-4235 Series

### Electrical Characteristics

#### Insulation Resistance

100 Megohm Min. at 500V DC

#### Dielectric Strength

500V AC for 1 Minute

#### Contract Resistance

*Before Durability Test*

50 Milliohms Max.

*After Durability Test*

100 Milliohms Max.

#### Voltage Rating

16 Volts DC

#### Current Rating

0.3A

#### Operating Temperature

-25°C to +80°C

### Ordering Information

|         |   |               |   |         |
|---------|---|---------------|---|---------|
| ST-4235 | — | 3/5           | — | N       |
| Series  |   | Configuration |   | Options |

#### Series

ST-4235 - Stacked 3.5mm Audio Jack over 3.5mm Audio Jack

#### Configuration

3/3 - 3 Pins over 3 Pins

3/5 - 3 Pins over 5 Pins

3/9 - 3 Pins over 9 Pins

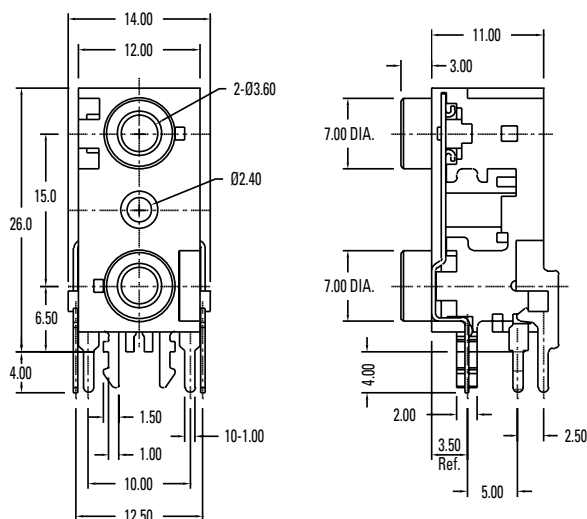
3/11 - 3 Pins over 11 Pins

#### Threading Options

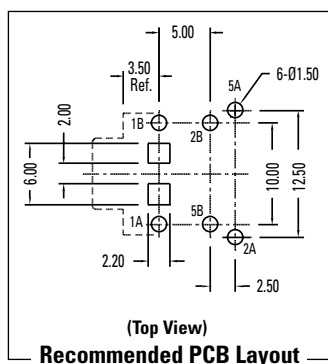
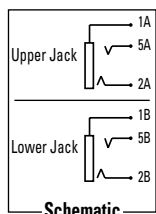
N - Non-Threaded

## ST-4235 Dimensions

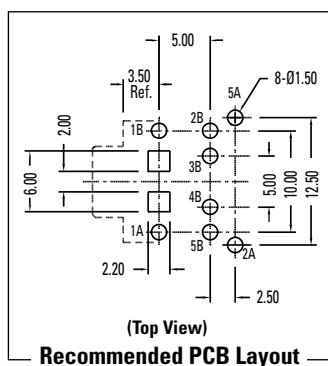
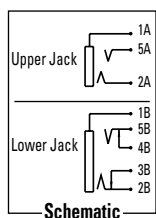
Dimensions in mm



### ST-4235-3/3-N



### ST-4235-3/5-N

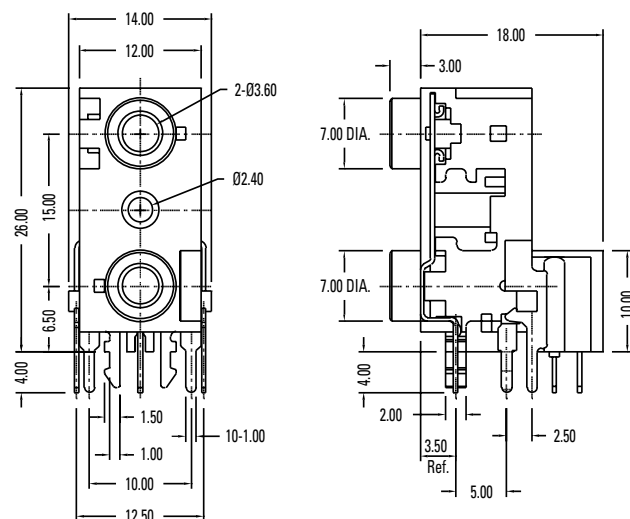


## AUDIO JACKS

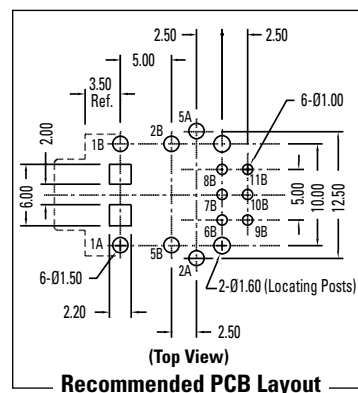
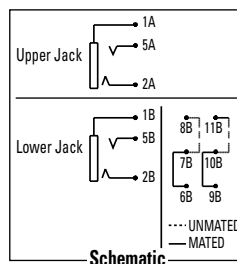
### ST-4235 Series

## ST-4235 Dimensions

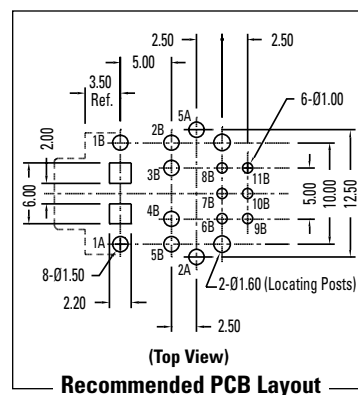
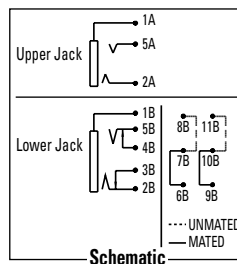
Dimensions in mm

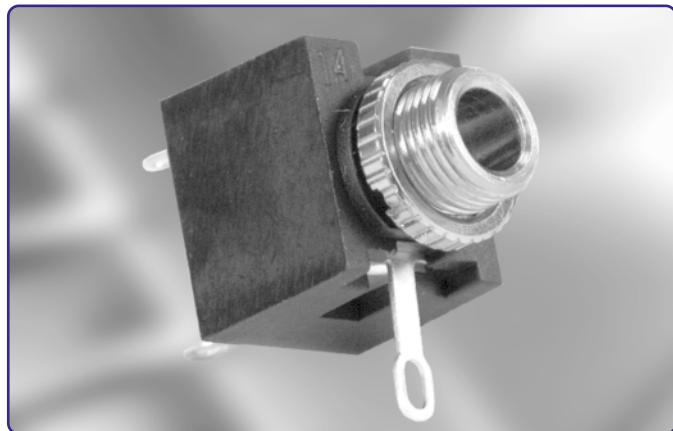


### ST-4235-3/9-N



### ST-4235-3/11-N





## STP-3501 Series Panel Mount 3.5mm Audio Jack

### Features

- Panel Mount
- Eyelet Terminals
- Audio Applications for Computers and Multimedia
- CSA/NRTL Certified File No. LR78160



### Performance Specifications Materials and Finish

#### Housing

PBT Thermoplastic, Black Color, UL 94V-0 Rated



#### Bushing

Brass, Nickel Plated

#### Terminals

Copper Alloy, Silver Plated

### Mechanical Characteristics

#### Insertion Force

0.3kg - 3.0kg

#### Extraction Force

0.3kg - 3.0kg

#### Durability

5000 Mating Cycles

### Electrical Characteristics

#### Insulation Resistance

100 Megohm Min. at 500V DC

#### Withstanding Voltage

500V AC for 1 Minute

#### Contact Resistance

Before Durability Test

30 Milliohms Max

After Durability Test

60 Milliohms Max

#### Operating Temperature

-25°C to +80°C

## AUDIO JACKS

### STP-3501 Series

### Ordering Information

|          |   |                |         |
|----------|---|----------------|---------|
| STP-3501 | — | 3              | C       |
| Series   |   | Number of Pins | Options |

#### Series

STP-3501 - 3.5mm Panel Mount Audio Jack

#### Number of Pins

3 - 3 Pins

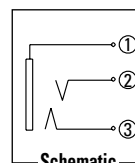
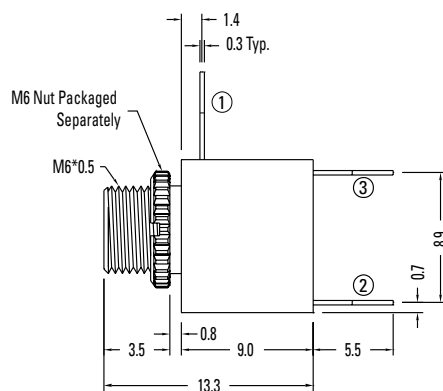
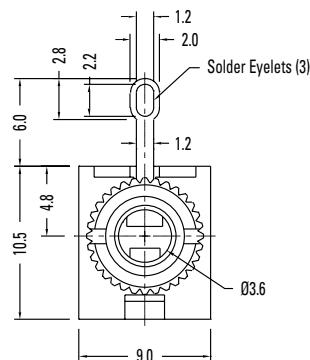
#### Threading Option

C - Threaded Barrel

### Dimensions

Dimensions in mm

#### STP-3501-3C





## KLP Series RCA Phono Jack PCB Mount

### Features



- Audio Applications for Computers and Multimedia
- Two Contact Cost Efficient Design
- Right Angle and Vertical Mount Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing:

KLP - PBT Thermoplastic, UL94V-0 Rated, Black, Red, Yellow, Orange and White Colors  
KLPHT\* - Zytel HTN, High Temperature Nylon, UL94V-0 Rated, Black, Yellow, Red and White Colors

**Terminals:** Copper Alloy, Tin over Nickel Plating

#### Mechanical Characteristics

**Insertion Force:** 0.3kg - 5.0kg

**Extraction Force:** 0.3kg - 3.0kg

**Durability:** 5000 Mating Cycles

#### Electrical Characteristics

##### Contact Resistance:

*Before Durability Test:* 30 Milliohms Max

*After Durability Test:* 60 Milliohms Max

**Insulation Resistance:** 100 Megohms Min. at 500V DC

**Dielectric Strength:** 250V AC for 1 Minute

**Operating Temperature:** -25°C to +80°C

\* Only Available in Right Angle

## RCA PHONO JACKS

### KLP Series

### Ordering Information

|        |   |         |   |       |
|--------|---|---------|---|-------|
| KLP    | — | 0848A-2 | — | B     |
| Series |   | Type    |   | Color |

#### Series

KLP - RCA Phono Jack

KLPHT - Reflow Compatible Version

#### Type

0848-2 - Single, Vertical

0848A-2 - Single, Right Angle

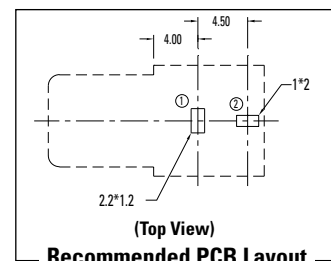
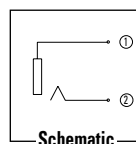
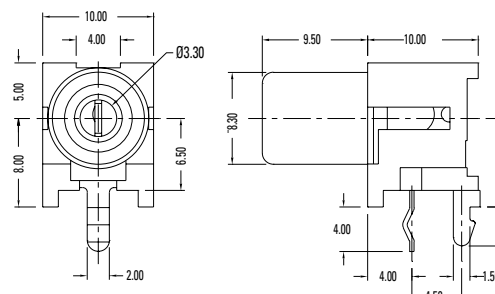
#### Colors

B - Black    R - Red    W - White    Y - Yellow    O - Orange

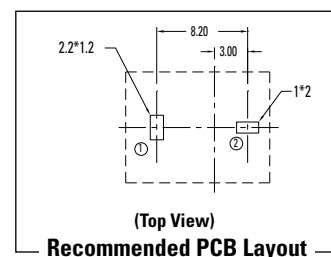
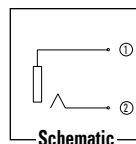
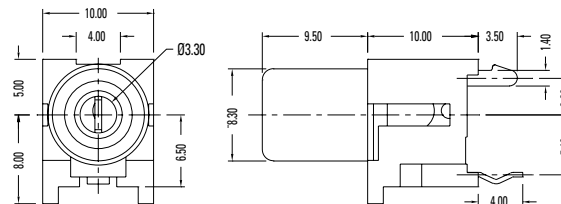
### KLP Series Dimensions

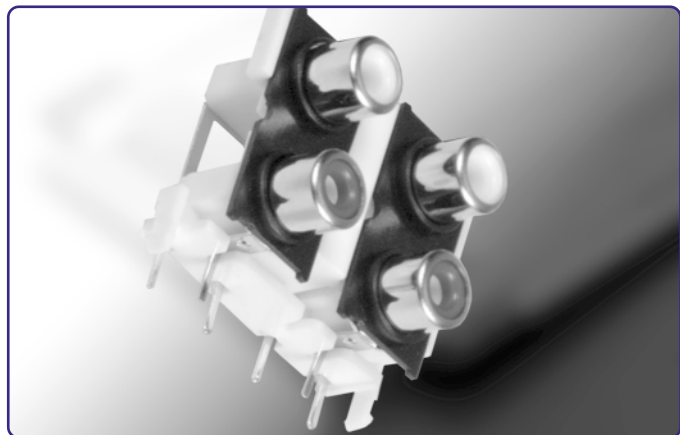
Dimensions in mm

#### KLP-0848A-2



#### KLP-0848-2





## KLP42 Series Stacked RCA Phono Jack PCB Mount

### Features



- Audio Applications for Computers and Multimedia
- Gold Plating Available Upon Request
- Various Color and Stacking Options Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Housing:

KLP42 - ABS Thermoplastic\*, UL94V-0 Rated,  
Black, Red, Yellow, and White Colors



**Terminals:** Copper Alloy, Tin over Nickel Plating

#### Mechanical Characteristics

##### Insertion Force:

0.3kg - 5.0kg

##### Extraction Force:

0.3kg - 3.0kg

##### Durability:

5000 Mating Cycles

#### Electrical Characteristics

##### Contact Resistance

Before Durability Test: 30 Milliohms Max

After Durability Test: 60 Milliohms Max

##### Insulation Resistance:

100 Megohms Min. at 500V DC

##### Dielectric Strength:

250V AC for 1 Minute

##### Operating Temperature:

-25°C to +80°C

\*Not Recommended For Wave Solder Process

## RCA PHONO JACKS

### KLP42 Series

### Ordering Information

|        |   |      |   |          |
|--------|---|------|---|----------|
| KLP42  | — | 62   | — | WW/RR/YY |
| Series |   | Type |   | Color    |

#### Series

KLP42 - Stacked RCA Phono Jack

#### Type

60 - Single Column, Double Row

61 - Double Column, Double Row

62 - Triple Column, Double Row

#### Color Layout

60 - X / Z

61 - X, X1 / Z, Z1

62 - X, Z / X1, Z1 / X2, Z2

#### Color Options

B - Black

R - Red

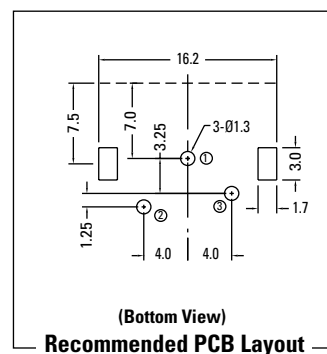
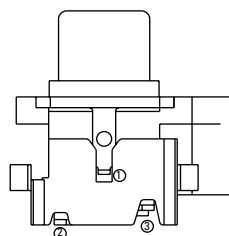
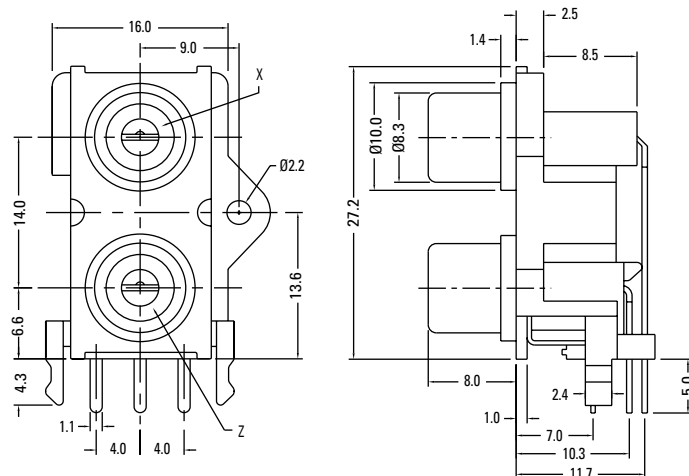
W - White

Y - Yellow

### KLP42 Series Dimensions

Dimensions in mm

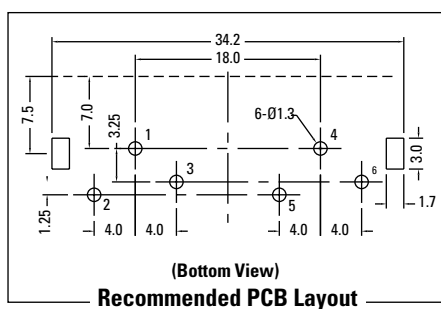
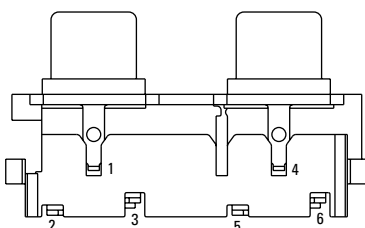
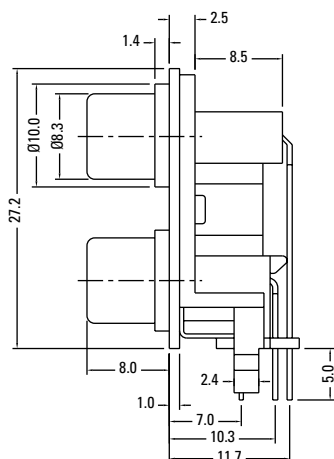
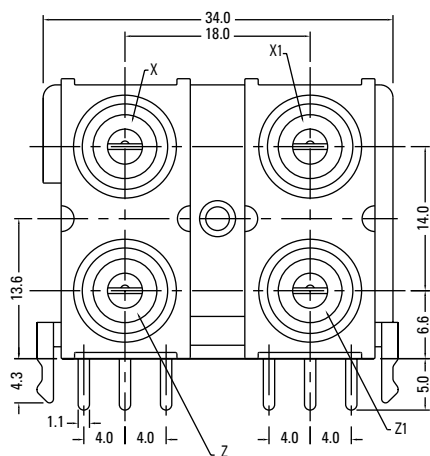
#### KLP42-60



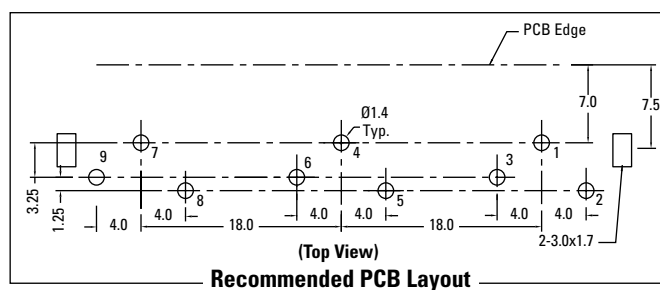
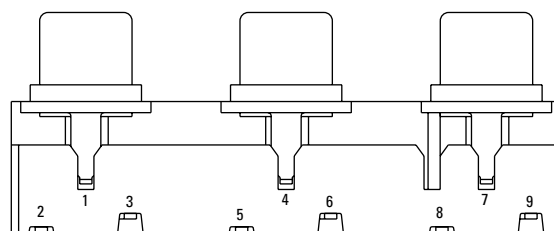
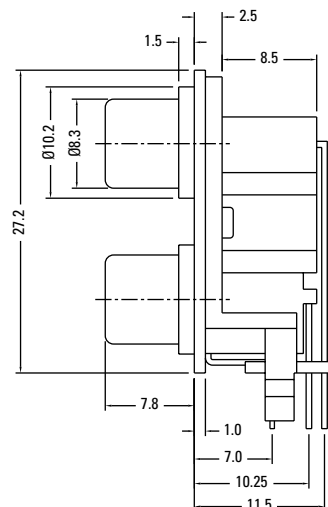
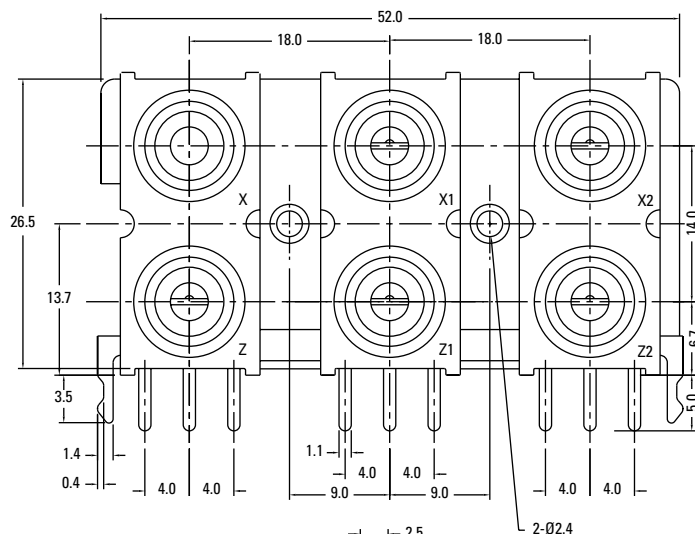
## KLP42 Series Socket Configurations and Recommended PCB Layout

Dimensions in mm

### KLP42-61



### KLP42-62



**KYCON continues its leadership in DC Power Connectors by offering a complete line of sizes and options.**

### Features:

- Applications include Laptop Computers, Cellular Phones and other Consumer Electronic Devices
- Available in Through Hole, Surface Mount, Panel Mount and Reflow Compatible
- Tape and Reel Packaging Available for Automated Assembly
- Screw Machine Contact Center Pin for High Current Capability



## DC POWER CONNECTORS

### Directory

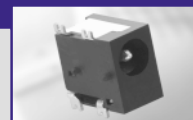
#### Right Angle 2.0 / 2.5mm

|                                 |            |
|---------------------------------|------------|
| <b>KLD - Through Hole</b>       | <b>120</b> |
| <b>KLD-SMT - Hybrid</b>         | <b>121</b> |
| <b>KLD-SMT2 - Surface Mount</b> | <b>122</b> |



#### Mini Right Angle 1.0 / 1.3mm

|                                |            |
|--------------------------------|------------|
| <b>KLD - Through Hole</b>      | <b>123</b> |
| <b>KLD-SMT - Surface Mount</b> | <b>124</b> |



#### Vertical 2.0 / 2.5mm

|                                 |            |
|---------------------------------|------------|
| <b>KLDV - Through Hole</b>      | <b>125</b> |
| <b>KLDV-SMT - Surface Mount</b> | <b>126</b> |



#### Panel Mount 2.0 / 2.5mm

|               |            |
|---------------|------------|
| <b>KLDP -</b> | <b>127</b> |
|---------------|------------|



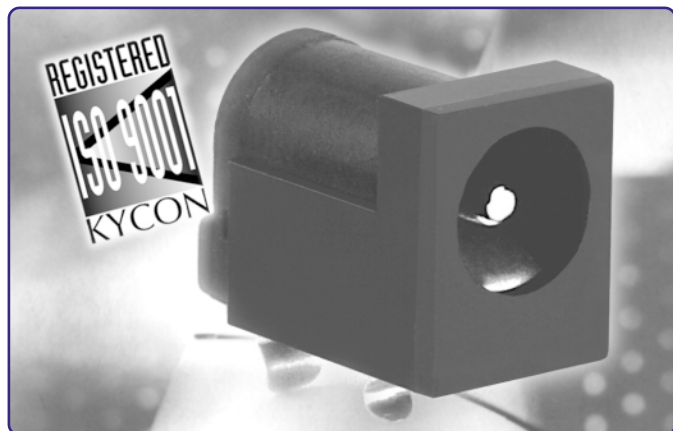
#### Snap & Lock

|                          |            |
|--------------------------|------------|
| <b>KPJ - PCB Mount</b>   | <b>128</b> |
| <b>KPP - Cable Mount</b> | <b>128</b> |



### Options:

| Series                    | KLD | KLD-SMT | KLD-SMT2 | KLD-(Mini) | KLD-SMT-(Mini) | KLDV | KLDV-SMT | KLDP | KPJ | KPP |
|---------------------------|-----|---------|----------|------------|----------------|------|----------|------|-----|-----|
| Through Hole              | •   |         |          | •          |                | •    |          |      | •   |     |
| SMT                       |     | •       | •        |            | •              |      | •        |      |     |     |
| Panel Mount               |     |         |          |            |                |      |          | •    |     |     |
| Vertical Mount            |     |         |          |            |                | •    | •        |      |     |     |
| Built in DC on/off        | •   | •       | •        | •          | •              | •    | •        | •    |     |     |
| High Temp                 | •   | •       | •        | •          | •              | •    | •        |      |     |     |
| 2mm & 2.5mm Inner Pin DIA | •   | •       | •        |            |                | •    | •        | •    |     |     |
| 1mm & 1.3mm Inner Pin DIA |     |         |          | •          | •              |      |          |      |     |     |
| Snap & Lock               |     |         |          |            |                |      |          |      | •   | •   |
| Tape & Reel               |     | •       | •        |            | •              |      | •        |      |     |     |
| Plug                      |     |         |          |            |                |      |          |      |     | •   |



## KLD Series PCB Mount DC Power Jack

### Features

- 2.0mm and 2.5mm
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- Laptop and Palm Computers, Portable Modems, Radar Detectors, and Other Portable Device Applications
- CSA/NRTL Certified File No. LR78160



### Materials and Finish



**Plastic Housing:** PBT Thermoplastic, UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1 and #3:** Brass, Tin Plated

**Contact #2:** Phosphor Bronze, Tin Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

**Rated Voltage:** DC 24V

**Rated Current:** 3.5 Amps

**Insulation Resistance:** 100 Megohms Min.

**Dielectric Withstanding Voltage:** 500V AC for 1 Minute

### Mechanical Characteristics

**Durability Test:** 5000 Cycles

**Insertion Force:** 0.3kg - 2.0kg

**Extraction Force:** 0.3kg - 2.0kg

**Operating Temperature:** -25°C to +85°C

### Ordering Information

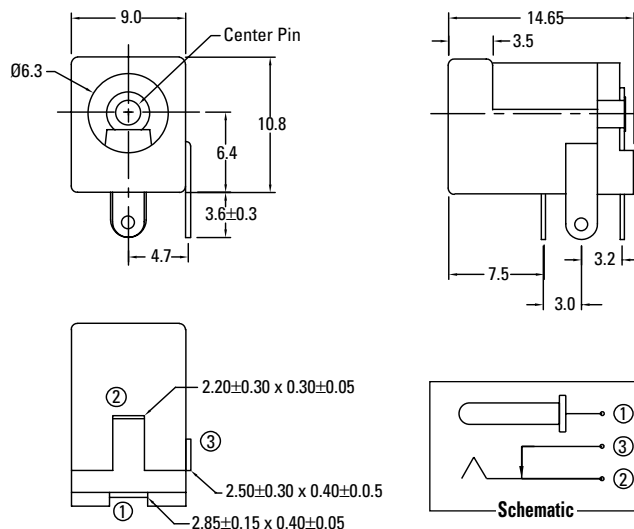
| Part Number* | Inner Pin Diameter | Lead Style |
|--------------|--------------------|------------|
| KLD-0202-A   | 2.0mm±0.05         | Straight   |
| KLD-0202-AC  | 2.0mm±0.05         | Crimped    |
| KLD-0202-B   | 2.5mm±0.05         | Straight   |
| KLD-0202-BC  | 2.5mm±0.05         | Crimped    |

## DC POWER CONNECTORS

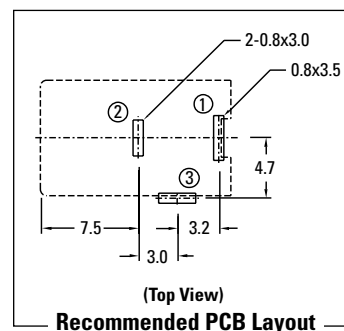
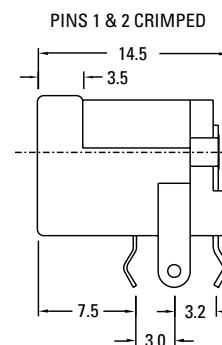
### KLD Series

### KLD Series Dimensions

#### KLD-0202-A, KLD-0202-B

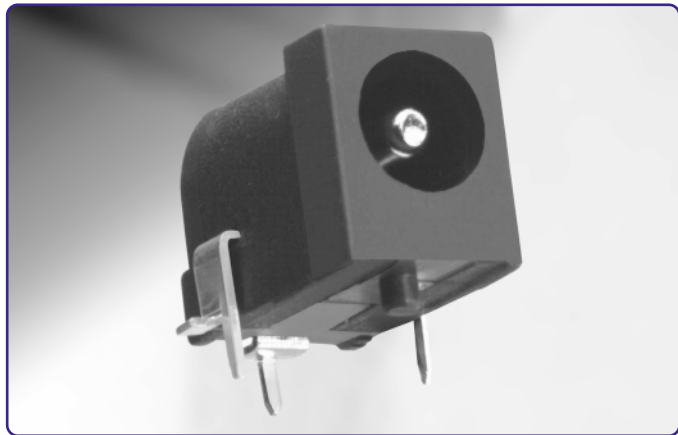


#### KLD-0202-AC, KLD-0202-BC



Dimensions in mm

\*Also available - KLD-HT Reflow Compatible  
Contact factory for specifications. 888-KYCON-22



## KLD-SMT Series Hybrid DC Power Jack

### Features

- 2.0mm and 2.5mm
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- Laptop and Palm Computer, Portable Modems, Radar Detectors, and Other Portable Device Applications
- High Temperature Material For Reflow Compatibility
- Packaged in Tubes for Automated Assembly
- Optional Center Peg Available
- CSA/NRTL Certified File No. LR78160



### Performance Specifications

#### Materials and Finish

**Plastic Housing:** Polyamide High Temperature Thermoplastic, UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1:** Brass, Tin Plated

**Contact #2:** Phosphor Bronze, Silver Plated

**Contact #3:** Brass, Silver Plated



### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max

Plug to Contacts: 50 Milliohms Max

*After Durability Test*

Between Terminals: 60 Milliohms Max

Plug to Contacts: 100 Milliohms Max

#### Rated Voltage

DC 24V

#### Rated Current

3.5 Amps

#### Insulation Resistance

100 Megohms Min.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

## DC POWER CONNECTORS

### KLD-SMT Series

### Mechanical Characteristics

**Durability Test:** 5000 Cycles

**Insertion Force:** 0.3 kg - 2.0 kg

**Extraction Force:** 0.3 kg - 2.0 kg

**Operating Temperature:** -25°C to +85°C

**Max Reflow Soldering Temperature:**

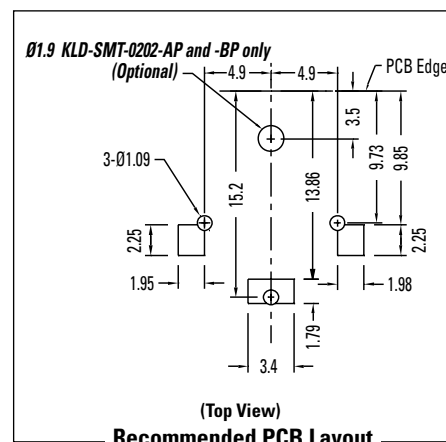
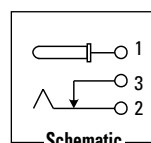
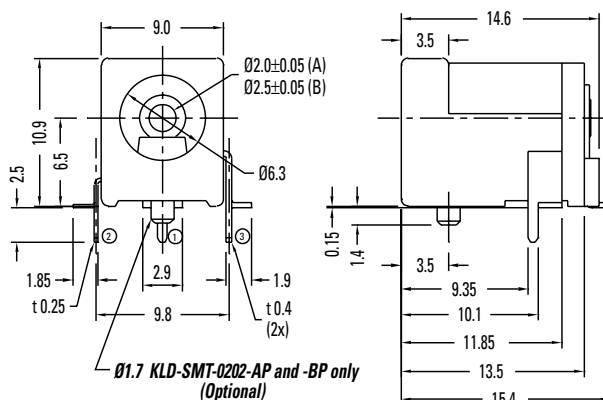
230°C for 30 Seconds

260°C for 10 Seconds

### Ordering Information

| Part Number     | Inner Pin Diameter | Center Peg |
|-----------------|--------------------|------------|
| KLD-SMT-0202-A  | 2.0mm±0.05         | No         |
| KLD-SMT-0202-AP | 2.0mm±0.05         | Yes        |
| KLD-SMT-0202-B  | 2.5mm±0.05         | No         |
| KLD-SMT-0202-BP | 2.5mm±0.05         | Yes        |

### KLD-SMT Series Dimensions



Dimensions in mm



## KLD-SMT2 Series Surface Mount DC Power Jack

### Features

- 2.0mm and 2.5mm
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- Laptop and Palm Computers, Portable Modems, Radar Detectors, and Other Portable Device Applications
- Surface Mount
- CSA/NRTL Certified File No. LR78160



### Materials and Finish

**Plastic Housing:** Nylon 66 High Temperature Thermoplastic,  
UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1:** Phosphor Bronze, Silver Plated

**Contact #2 and #3:** Brass, Silver Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

#### Rated Voltage:

DC 24V

#### Rated Current:

3.5 Amps

#### Insulation Resistance:

100 Megohms Min.

#### Dielectric Withstanding Voltage:

500V AC for 1 Minute

## DC POWER CONNECTORS

### KLD-SMT2 Series

### Mechanical Characteristics

**Durability Test:** 5000 Cycles

**Insertion Force:** 0.3kg - 2.0kg

**Extraction Force:** 0.3kg - 2.0kg

**Operating Temperature:** -25°C to +85°C

**Max Reflow Soldering Temperature:**

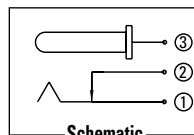
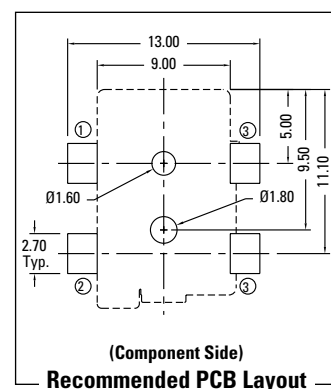
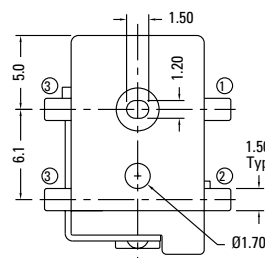
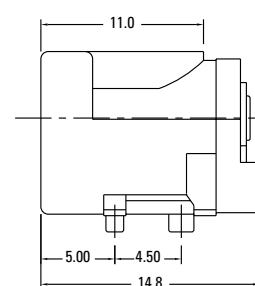
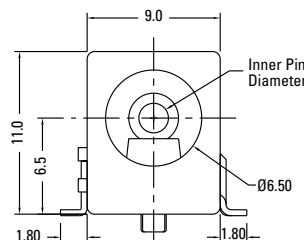
230°C for 30 Seconds

260°C for 10 Seconds

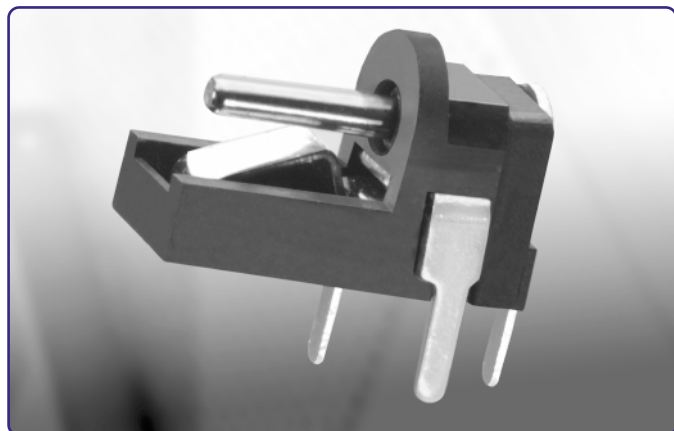
### Ordering Information

| Part Number*       | Inner Pin Diameter | Packaging   |
|--------------------|--------------------|-------------|
| KLD-SMT2-0202-A    | 2.0mm±0.05         | Bulk        |
| KLD-SMT2-0202-A-TR | 2.0mm±0.05         | Tape & Reel |
| KLD-SMT2-0202-B    | 2.5mm±0.05         | Bulk        |
| KLD-SMT2-0202-B-TR | 2.5mm±0.05         | Tape & Reel |

### KLD-SMT2 Series Dimensions



Dimensions in mm



## KLD Series PCB Mount Mini DC Power Jack

### Features

- 1.0mm and 1.3mm
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- CSA/NRTL Certified File No. LR78160



### Materials and Finish

**Standard: Plastic Housing:** PBT Thermoplastic,  
UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1 and #3:** Brass, Tin Plated

**Contact #2:** Phosphor Bronze, Tin Plated

**HT Option: Plastic Housing:** PA66 High Temperature Thermoplastic,  
UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1 and #3:** Brass, Silver Plated

**Contact #2:** Phosphor Bronze, Silver Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

**Rated Voltage:** DC 24V, **Rated Current:** 2.5 Amps

**Insulation Resistance:** 50 Megohms Min.

### Mechanical Characteristics

**Durability Test:** 5000 Cycles

**Insertion Force:** 0.3kg - 2.0kg

**Extraction Force:** 0.3kg - 2.0kg

**Operating Temperature:** -25°C to +85°C

### Ordering Information

| Part Number      | Inner Pin Diameter | Body/Lead Style        |
|------------------|--------------------|------------------------|
| KLD-0201-A/-AHT* | 1.0mm±0.05         | Closed, Straight Leads |
| KLD-0201-B/-BHT* | 1.3mm±0.05         | Closed, Straight Leads |
| KLD-0101-A       | 1.0mm±0.05         | Open, Straight Leads   |
| KLD-0101-B       | 1.3mm±0.05         | Open, Straight Leads   |
| KLD-0201-AC      | 1.0mm±0.05         | Closed, Crimped Leads  |
| KLD-0201-BC      | 1.3mm±0.05         | Closed, Crimped Leads  |

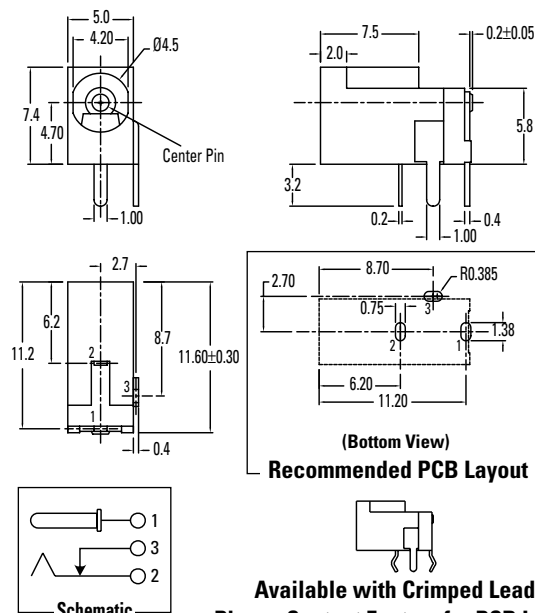
\*High temperature option (HT) also available in Tape & Reel Packaging (-TR)

## DC POWER CONNECTORS

### KLD Series

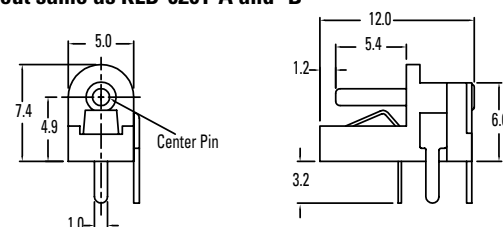
### KLD Series Dimensions

#### KLD-0201-A, KLD-0201-B



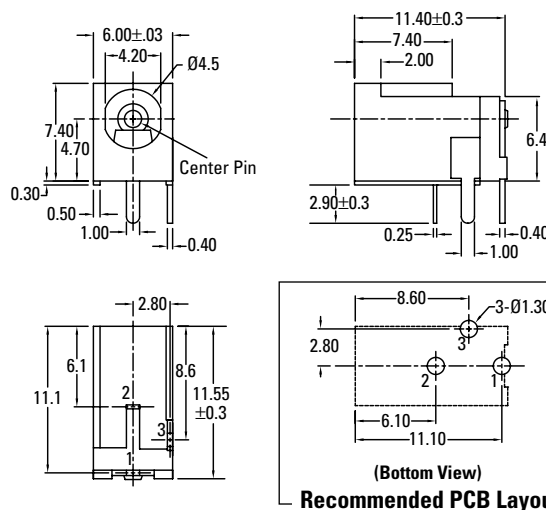
#### KLD-0101-A, KLD-0101-B

PCB Layout same as KLD-0201-A and -B

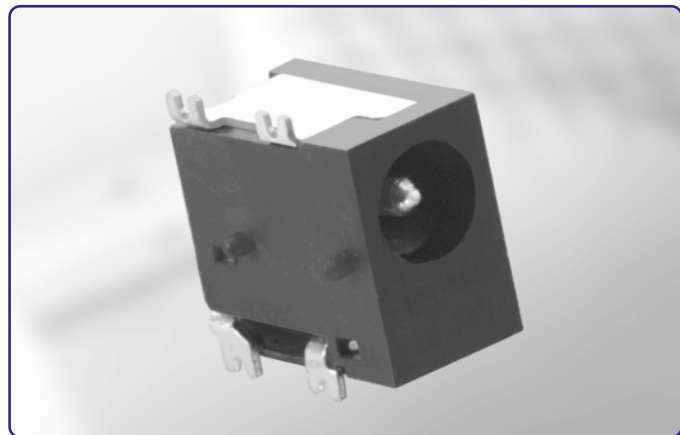


#### KLD-0201-AHT, KLD-0201-BHT

Max. Soldering Temp: 230°C for 30 sec.



Dimensions in mm



## KLD-SMT Series Surface Mount Mini DC Power Jack

### Features



- 1.0mm and 1.3mm
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- Laptop and Palmtop Computers, Portable Modems, Radar Detectors, and Other Portable Device Applications
- High Temperature Material For Reflow Compatibility
- Packaged in Tape & Reel for Automated Assembly
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Plastic Housing:

LCP High Temperature Thermoplastic,  
UL94V-0 Rated, Black Color



**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1:** Phosphor Bronze, Silver Plated

**Contact #2 and #3:** Brass, Silver Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

**Rated Voltage:** 24V DC

**Rated Current:** 2.5 Amps

**Insulation Resistance:** 100 Megohms Min.

**Dielectric Withstanding Voltage:** 500V AC for 1 Minute

## DC POWER CONNECTORS

### KLD-SMT Series

### Mechanical Characteristics

**Durability Test:** 2500 Cycles

**Insertion Force:** 0.3kg - 2.0kg

**Extraction Force:** 0.3kg - 2.0kg

**Operating Temperature:** -25°C to +85°C

**Max Reflow Soldering Temperature**

230°C for 30 Seconds

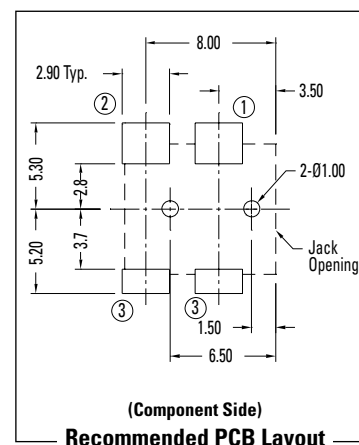
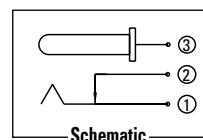
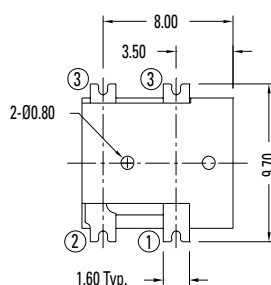
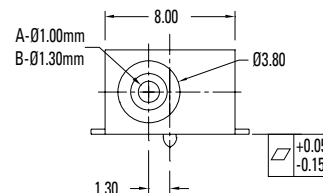
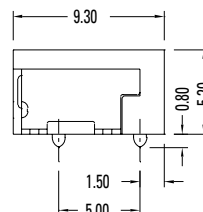
260°C for 10 Seconds

| Part Number        | Inner Pin Diameter | Packaging   |
|--------------------|--------------------|-------------|
| KLD-SMT-0201L-A    | 1.0mm              | Bulk        |
| KLD-SMT-0201L-A-TR | 1.0mm              | Tape & Reel |
| KLD-SMT-0201L-B    | 1.3mm              | Bulk        |
| KLD-SMT-0201L-B-TR | 1.3mm              | Tape & Reel |

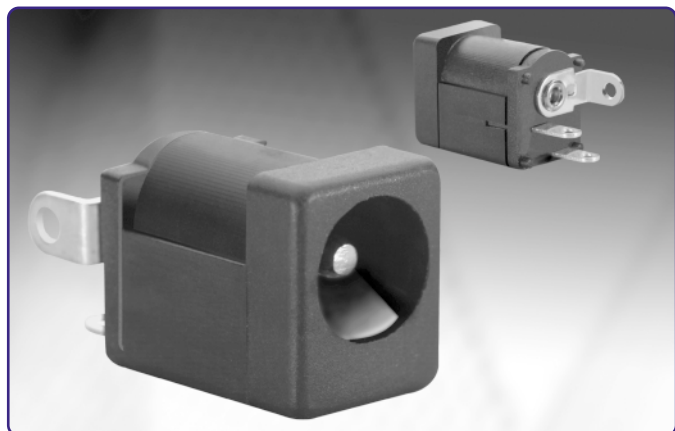
### KLD Series Dimensions

Dimensions in mm

#### KLD-SMT-0201L



(Component Side)  
Recommended PCB Layout



## KLDV Series Vertical PCB Mount DC Power Jack

### Features



- 2.0mm and 2.5mm
- Mounts Perpendicular to PCB
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish



**Plastic Housing:** PBT Thermoplastic, UL94V-0, Black Color

**Center Pin:** Brass, Nickel Plated

**Contact #2:** Phosphor Bronze, Tin Plated

**Contact #1 and #3:** Brass, Tin Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

#### Rated Voltage

24V DC

#### Rated Current

3.5 Amps

#### Insulation Resistance

100 Megohms Min.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

## DC POWER CONNECTORS

### KLDV-SMT Series

### Mechanical Characteristics

#### Durability Test

5000 Cycles

#### Insertion Force

0.3kg - 2.0kg

#### Extraction Force

0.3kg - 2.0kg

#### Operating Temperature

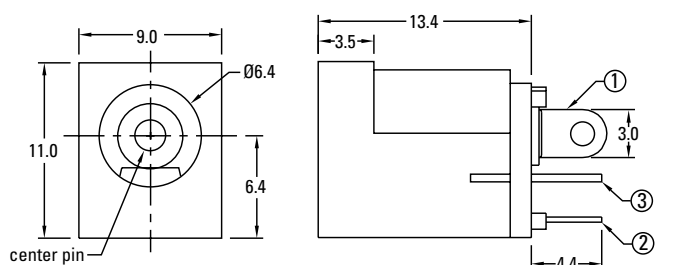
-25°C to +85°C

### Ordering Information

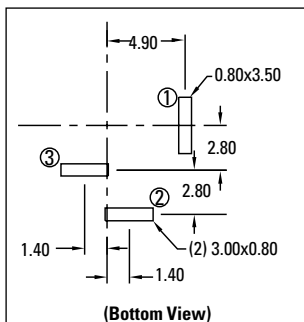
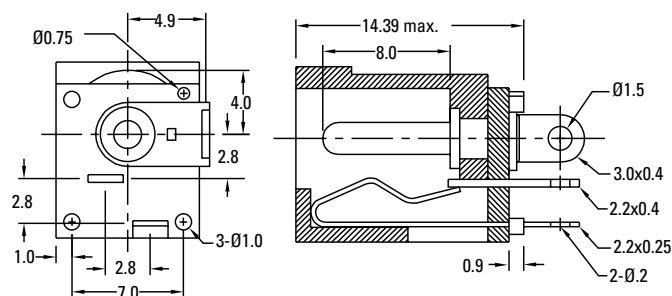
| Part Number | Inner Pin Diameter |
|-------------|--------------------|
| KLDV-0202-A | 2.0mm              |
| KLDV-0202-B | 2.5mm              |

### KLDV Series Dimensions

Dimensions in mm

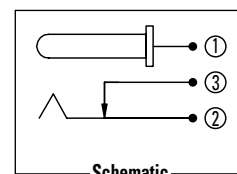


#### (Rear View)

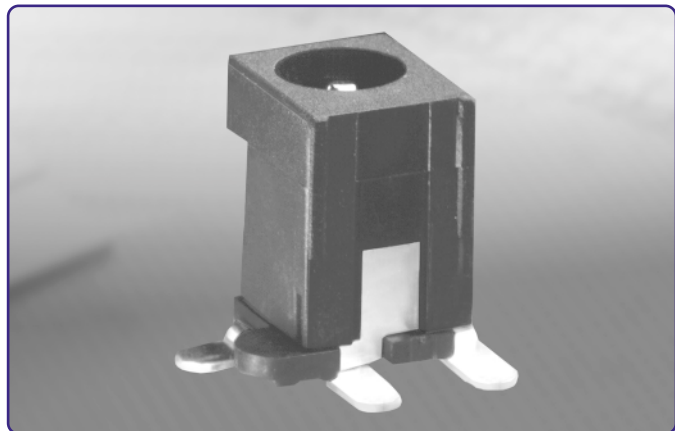


#### (Bottom View)

#### Recommended PCB Layout



Schematic



## KLDV-SMT Series Vertical Surface Mount DC Power Jack

### Features



- 2.0mm and 2.5mm
- Mounts Perpendicular to PCB
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- CSA/NRTL Certified File No. LR78160
- Packaged in Tape & Reel for Automated Assembly

### Performance Specifications

#### Materials and Finish

##### Plastic Housing:

NY6T High Temperature Thermoplastic, UL94V-0, Black Color

##### Center Pin:

Copper Alloy, Nickel Plated

##### Contact #2:

Phosphor Bronze, Silver Plated

##### Contact #1 and #3:

Brass, Silver Plated

### Electrical Characteristics

#### Contact Resistance

##### Before Durability Test

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

##### After Durability Test

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

#### Rated Voltage

16V DC

#### Rated Current

3.0 Amps

#### Insulation Resistance

100 Megohms Min.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

## DC POWER CONNECTORS

### KLDV-SMT Series

### Mechanical Characteristics

#### Durability Test

5000 Cycles

#### Insertion Force

0.3kg - 2.0kg

#### Extraction Force

0.3kg - 2.0kg

#### Operating Temperature

-25°C to +85 °C

#### Max Reflow Soldering Temperature:

230°C for 30 Seconds

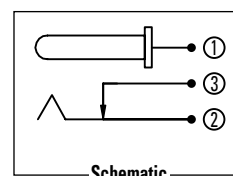
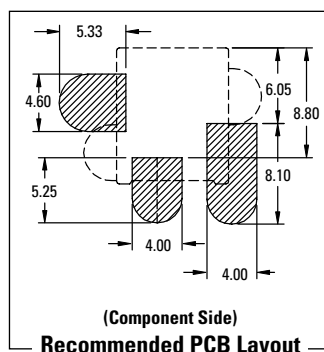
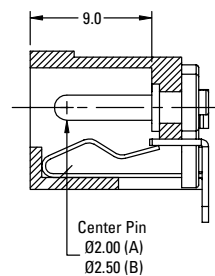
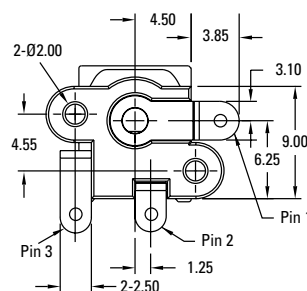
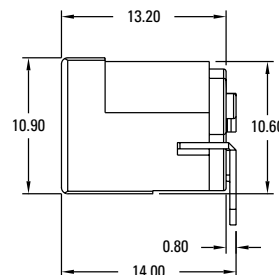
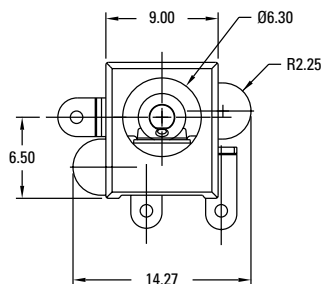
260°C for 10 Seconds

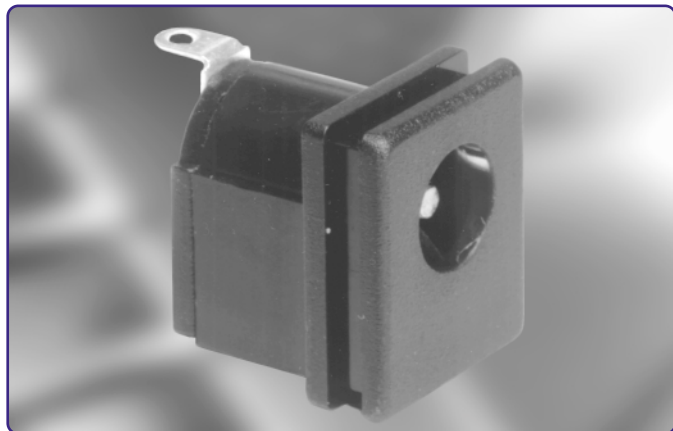
### Ordering Information

| Part Number      | Inner Pin Diameter |
|------------------|--------------------|
| KLDV-SMT-02-A-TR | 2.0mm              |
| KLDV-SMT-02-B-TR | 2.5mm              |

### KLDV-SMT Series Dimensions

Dimensions in mm





## KLDP Series Panel Mount DC Power Jack

### Features



- 2.0mm and 2.5mm
- Panel Slot Mount
- Solder Eyelets
- Built in DC On/Off Switch
- Screw Machine Contact Center Pin for High Current Capability
- Portable Electronic Devices
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish



##### Plastic Housing

PBT Thermoplastic, 30% Glass Filled, UL 94V-0 Rated, Black Color

**Center Pin:** Copper Alloy, Nickel Plated

**Contact #1:** Phosphor Bronze, Tin Plated

**Contact #2 and #3:** Brass, Tin Plated

### Electrical Characteristics

#### Contact Resistance

*Before Durability Test*

Between Terminals: 30 Milliohms Max.

Plug to Contacts: 50 Milliohms Max.

*After Durability Test*

Between Terminals: 60 Milliohms Max.

Plug to Contacts: 100 Milliohms Max.

#### Rated Voltage

DC 24V

#### Rated Current

3.5 Amps

#### Insulation Resistance

50 Megohms Min.

## DC POWER CONNECTORS

### KLDP Series

### Mechanical Characteristics

#### Durability Test

5000 Cycles

#### Insertion Force

0.3kg - 2.0kg

#### Extraction Force

0.3kg - 2.0kg

#### Operating Temperature

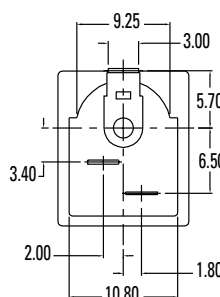
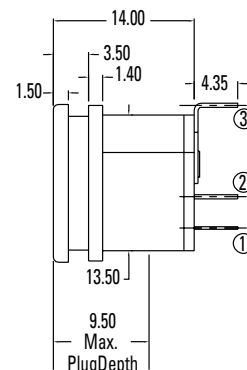
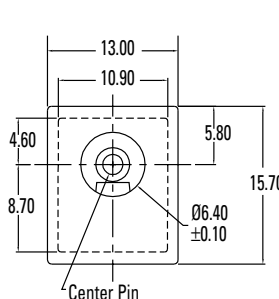
-25°C to +85°C

### Ordering Information

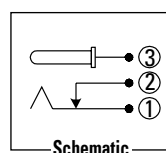
| Part Number | Inner Pin Diameter |
|-------------|--------------------|
| KLDP-0207-A | 2.0mm              |
| KLDP-0207-B | 2.5mm              |

### KLDP Series Dimensions

Dimensions in mm



| Terminal Dimensions (mm) |       |           |
|--------------------------|-------|-----------|
| #                        | Width | Thickness |
| 1                        | 3.30  | 0.25      |
| 2                        | 3.10  | 0.40      |
| 3                        | 3.00  | 0.40      |





## KPP/KPJ Series Snap and Lock PCB and Cable Mount

### Features



- Laptop Computers, Power Supplies and Other Portable Digital Equipment Applications
- Snap and Lock Feature Helps to Prevent Accidental Disconnects
- Two or Four Pins Transmit Power, or One Pin Can be Used For Signal Transmission
- For Signal and DC Power Applications
- Plugs Supplied in Kits Ready for Assembly
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Jack

Shield: Tin Plated

Body: PBT UL 94V-0 Rated

7.5 Amp Power Contact: Brass, Tin Plated 0.000010

1.0 Amp Signal Contact: Phosphor Bronze, Tin Plated 0.000010

##### Plug

Shield: Nickel Plated

Pins: Copper Alloy, Silver Plated

Plastics: UL 94V-0 Rated

### Electrical Characteristics

#### Contact Rating

3 Positions: Pin 1 and 2, 48V DC at 7.5A Max., Pin 3, 48V DC 1.0A Max.

4 Positions: 48V DC 7.5A Max. for all Pins

**Insulation Resistance:** 50 Megohms Min. at 250V DC

**Dielectric Strength:** 250V AC for 1 Minute

**Contact Resistance:** 50 Milliohms Max.

## DC POWER CONNECTORS

### KPJ / KPP Series

### Mechanical Characteristics

- Durability Test: 1000 Cycles
- Suggested Wire Awg. #18 for Power Wires, #24 for Signal Wire

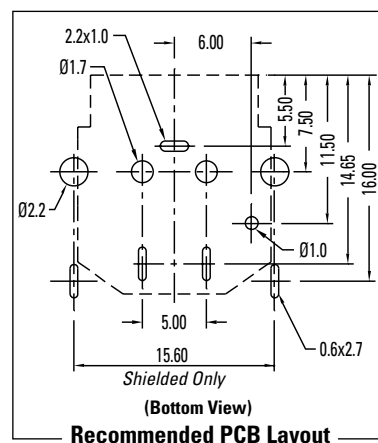
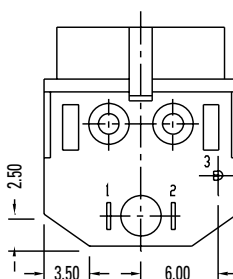
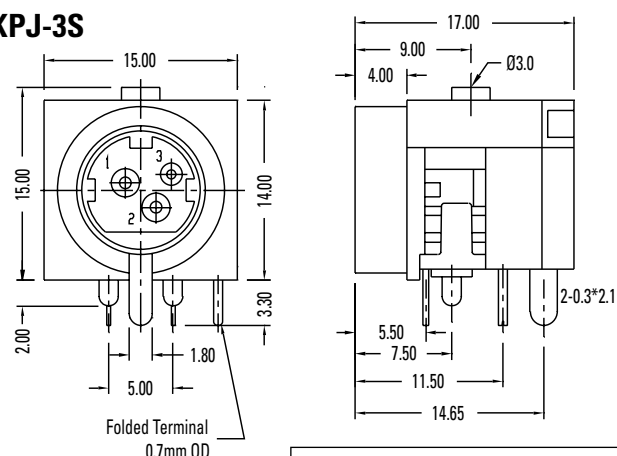
### Ordering Information

|                                                                           |   |                    |              |               |
|---------------------------------------------------------------------------|---|--------------------|--------------|---------------|
| KPJ                                                                       | — | 3                  | S            | —             |
| Series                                                                    |   | Number of Contacts | Contact Type | Shield Option |
| <b>Series</b>                                                             |   |                    |              |               |
| KPJ - Kycon Snap and Lock DC Power Jack, Right Angle PCB Mount Receptacle |   |                    |              |               |
| KPP - Kycon Snap and Lock DC Power Plug Cable Mount                       |   |                    |              |               |
| <b>Number of Contacts</b>                                                 |   |                    |              |               |
| 3,4                                                                       |   |                    |              |               |
| <b>Contact Type</b>                                                       |   |                    |              |               |
| S - Socket (KPJ Only)                                                     |   |                    |              |               |
| P - Plug (KPP Only)                                                       |   |                    |              |               |
| <b>Shield Option</b>                                                      |   |                    |              |               |
| Blank - Non-Shielded                                                      |   |                    |              |               |
| S - Shielded (KPJ only)                                                   |   |                    |              |               |

### KPJ Series Dimensions

Dimensions in mm

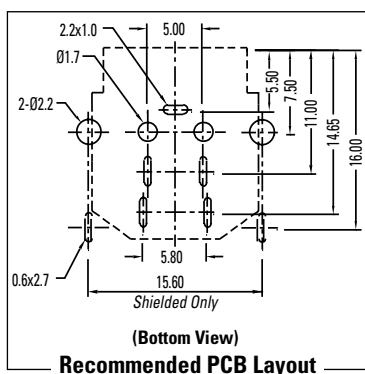
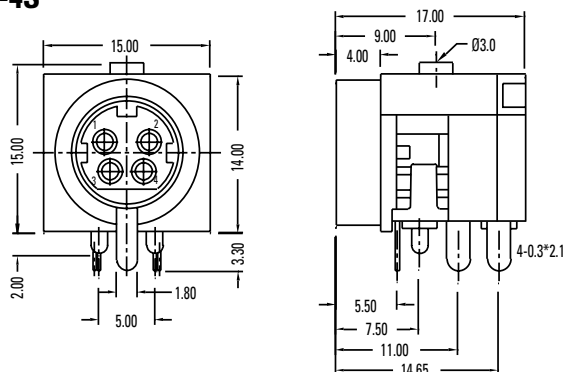
#### KPJ-3S



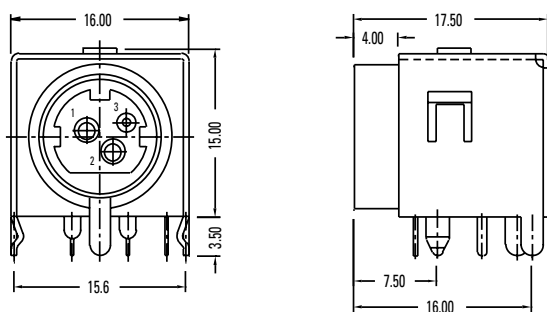
## KPJ Series Dimensions

Dimensions in mm

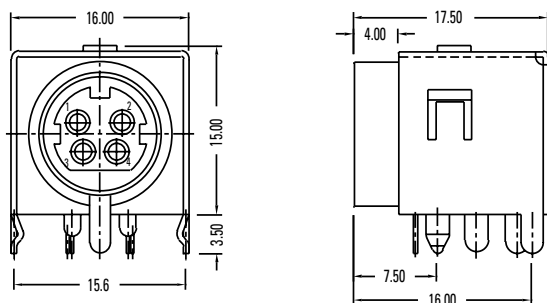
### KPJ-4S



### KPJ-3S-S



### KPJ-4S-S

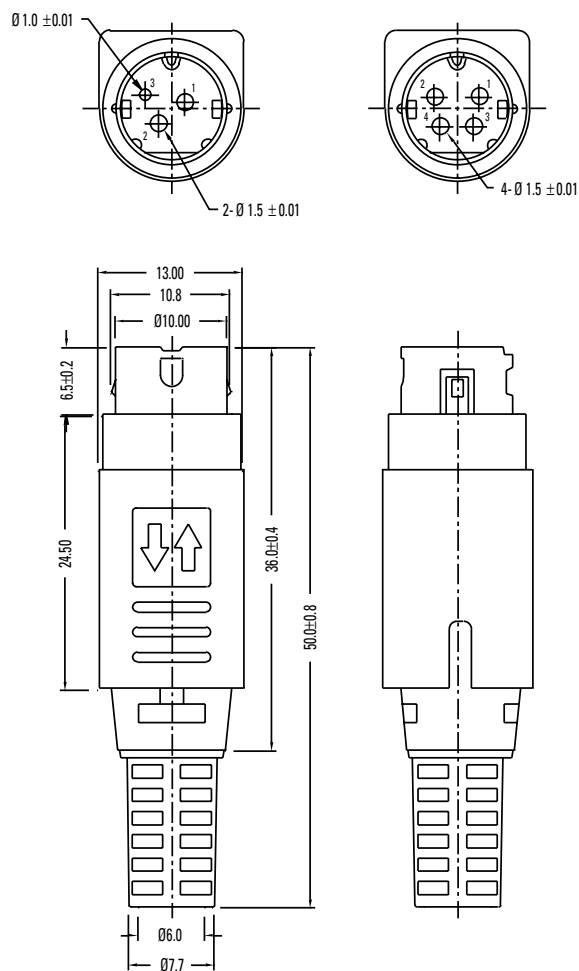


## DC POWER CONNECTORS

### KPJ / KPP Series

## KPP Series Dimensions

Dimensions in mm



**KYCON continues its leadership in Connectors by offering a complete line of sizes and options.**

**Features:**

- Various options available
- CSA/NRTL Certified File No. LR78160
- European applications



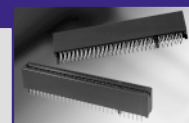
## OTHER CONNECTORS & SOCKETS

### Directory

#### Edge Card

**KHDS - High Density Card Edge**

**131**



#### DIMM Sockets

**KDM - Sockets**

**132**



#### SCART Connectors

**K-SCART - Right Angle, Vertical, Single & Stacked**

**134**



#### Miniature Ribbon Connectors

**37 Series - Features & Specifications**

**136**

**37 Series - Vertical**

**137**

**37 Series - Right Angle**

**138**



#### Chip Carrier Sockets

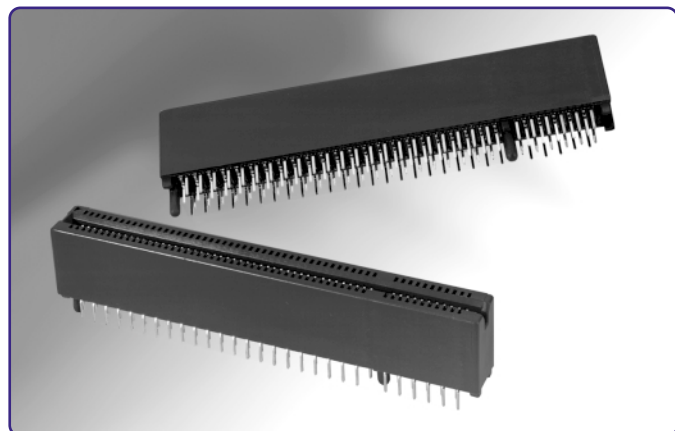
**P- Through Hole**

**139**

**SMP - Surface Mount**

**140**





## KHDS Series High Density 0.050" (1.27mm) Spacing

### Features



- PCI (32 & 64 bit), AGP, and Microchannel Applications (MCA)
- Surface Mount Compatible Materials
- Visual and Mechanical Polarization
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Body

High Temperature Thermoplastic, Glass Filled, UL94V-0 Rated

##### Contact Material

Phosphor Bronze

##### Contact Finish

Contacts are Plated with 0.0001 (0.0025) Nickel, Gold Flash on Contact Area, and Tin/Lead on the Solder Tail

### Electrical Characteristics

#### Contact Current Rating

1 Amp

#### Contact Resistance

30 Milliohms Max.

#### Dielectric Withstanding Voltage

500V AC for 1 Minute

#### Insulation Resistance

1000 Megohms Min after Exposure to Humidity

#### Plating Options

| Designator | Plating Description                                                                      |
|------------|------------------------------------------------------------------------------------------|
| Standard   | Gold flash over nickel on contacts.<br>Tin/lead over nickel on soldertails.              |
| 15         | 15µ" gold over nickel on mating end of contacts.<br>Tin/lead over nickel on soldertails. |
| 30         | 30µ" gold over nickel on mating end of contacts.<br>Tin/lead over nickel on soldertails. |

## EDGE CARD CONNECTORS

### KHDS Series

### Mechanical Characteristics

#### Insertion Force

8 Oz. Max.

#### Separation Force

1 Oz. Min.

#### Durability

100 Cycles

#### Steady State Humidity

90-95% RH at 40°C

#### Vibration

10 G's, 10-500 Hz, 2 Hrs.

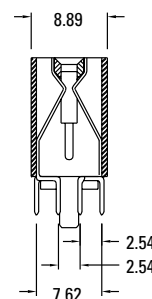
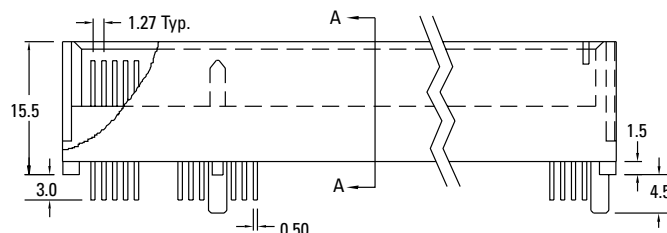
#### Temperature Rating

-50°C to +125°C

### KHDS Series Dimensions

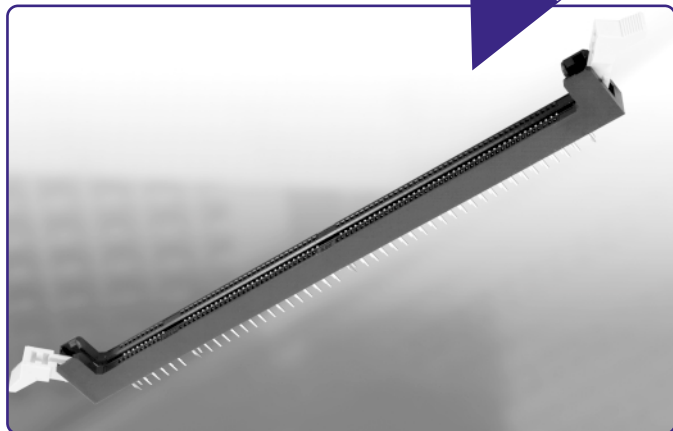
Dimensions in mm

0.050" [1.27mm] Contact Spacing



A - A

| Part Number   | Description                          | Application | Color |
|---------------|--------------------------------------|-------------|-------|
| KHDS-112-G    | 112 Contacts, Plastic Peg            | MCA         | Brown |
| KHDS-120-G    | 120 Contacts, Plastic Peg            | PCI         | White |
| KHDS-132-G    | 132 Contacts, Plastic Peg            | AGP         | Brown |
| KHDS-182-G    | 182 Contacts, Plastic Peg            | MCA         | Brown |
| KHDS-184-G-3V | 184 Contacts, Plastic Peg, 3.3 Volts | PCI         | White |
| KHDS-184-G-5V | 184 Contacts, Plastic Peg, 5.0 Volts | PCI         | White |



## KDM Series 168 Position DIMM Socket

### Features



- 168 Position Socket for Dual Inline Memory Modules
- Mates with JEDEC MO-161E Compatible DIMMs
- Visual and Mechanical Polarization
- Available in DRAM, SDRAM and Unbuffered DRAM
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Body

Nylon 6T UL94V-0 Rated, Glass Fiber Reinforced, Black Color

##### Ejectors:

Nylon 6T UL94V-0 Rated, Glass Fiber Reinforced, Natural Color

##### Terminals

Phosphor Bronze

##### Contact Plating

Gold Plating over Nickel on Contact Area,  
Tin/Lead Plating on Terminal

Other Plating Options Available, Contact Kycon for Details

### Electrical Characteristics

#### Voltage Rating

250 V AC

#### Current Rating

Signal Application Only

#### Insulation Resistance

1000 Megohm

#### Dielectric Withstanding

1000V AC for 1 Minute

#### Operating Temperature

-50°C to +125°C

## DIMM SOCKETS

### KDM Series

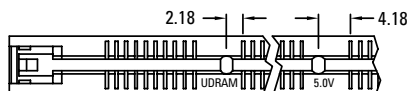
### Ordering Information

| P/N             | Post Location | PCB Layout | RAM             | Voltage |
|-----------------|---------------|------------|-----------------|---------|
| KDM168-5.0DR1TN | B, C, D       | B, C, D    | DRAM            | 5.0V    |
| KDM168-3.3DR1TN | B, C, D       | B, C, D    | DRAM            | 3.3V    |
| KDM168-5.0DR2TN | A, D          | A, D       | DRAM            | 5.0V    |
| KDM168-3.3DR2TN | A, D          | A, D       | DRAM            | 3.3V    |
| KDM168-5.0DR3TN | B, C          | B, C       | DRAM            | 5.0V    |
| KDM168-3.3DR4TN | A, C, D       | A, C, D    | DRAM            | 3.3V    |
| KDM168-5.0SD4TN | A, C, D       | A, C, D    | SDRAM           | 5.0V    |
| KDM168-3.3SD4TN | A, C, D       | A, C, D    | SDRAM           | 3.3V    |
| KDM168-5.0UN4TN | A, C, D       | A, C, D    | Unbuffered DRAM | 5.0V    |
| KDM168-3.3UN4TN | A, C, D       | A, C, D    | Unbuffered DRAM | 3.3V    |
| KDM168-3.3UN1TN | B, C, D       | B, C, D    | Unbuffered DRAM | 3.3V    |
| KDM168-3.3UN5TN | A, B, C, D    | A, B, C, D | Unbuffered DRAM | 3.3V    |

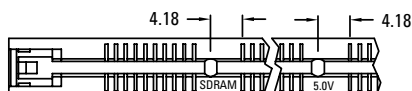
### KDM Series Dimensions

Dimensions in mm

#### 5.0V UNBUFFERED DRAM

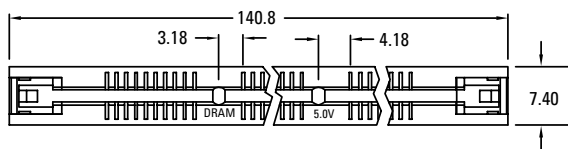


#### 5.0V SDRAM

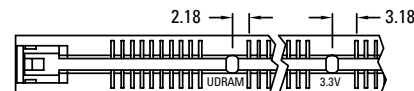


#### 5.0V DRAM

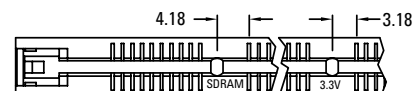
Ejectors not shown in this view



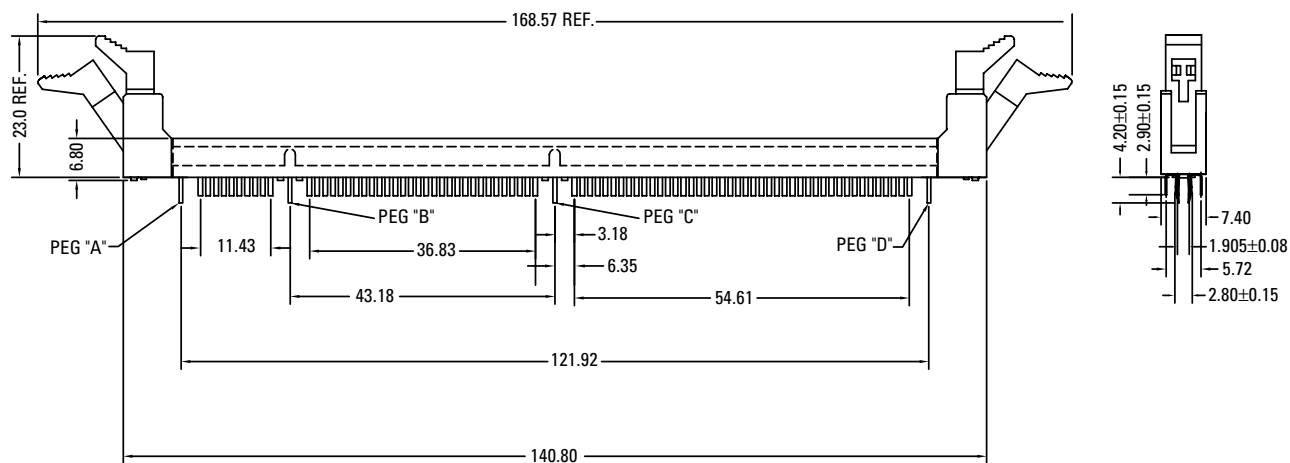
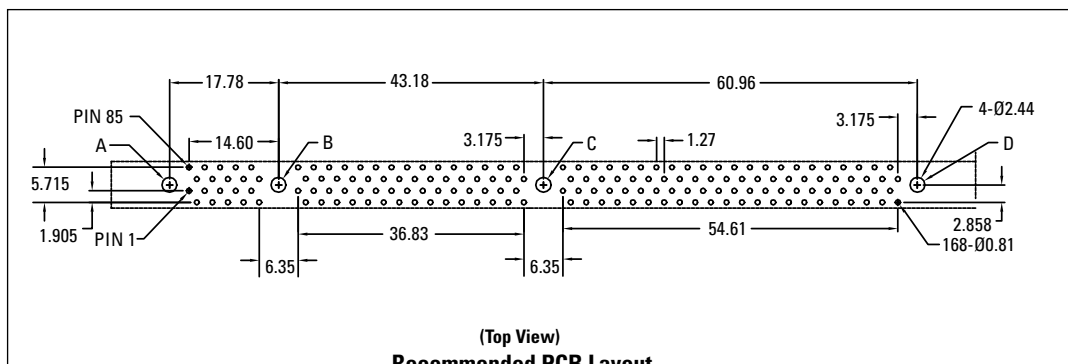
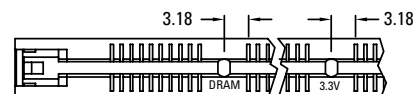
#### 3.3V UNBUFFERED DRAM

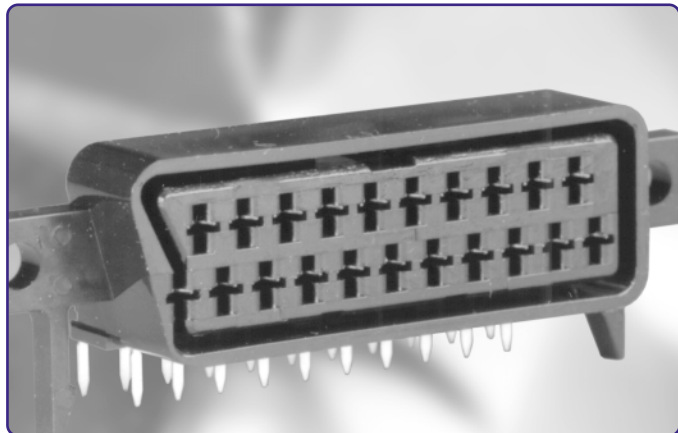


#### 3.3V SDRAM



#### 3.3V DRAM





## K-SCART Series SCART Connectors

### Features



- European Video Applications
- Single and Dual Port Available
- Right Angle and Vertical Design Options
- Various Mounting Options Available
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

**Body:** PBT Thermoplastic, UL94V-2 Rated, Black Color

**Contacts:** Phosphor Bronze, Tin/Lead Plated



### Mechanical Characteristics

#### Insertion Force

11.0kg Max.

#### Extraction Force

1.1kg - 7.0kg

### Electrical Characteristics

#### Current Rating

3.0A 100V AC

#### Contact Resistance

20 Megohms Max.

#### Insulation Resistance

100 Megohms Min. at 500V DC

#### Dielectric Withstanding Voltage

800V AC for 1 Minute

#### Operating Temperature

-25°C to +85°C

### Ordering Information

| Part Number  | Description                               |
|--------------|-------------------------------------------|
| K-SCART-021  | Single 21 Position, Right Angle           |
| K-SCART-028A | 21 Position Over 21 Position, Right Angle |
| K-SCART-022  | Single 21 Position, Right Angle, Slim     |
| K-SCART-024  | Single 21 Position, Vertical              |

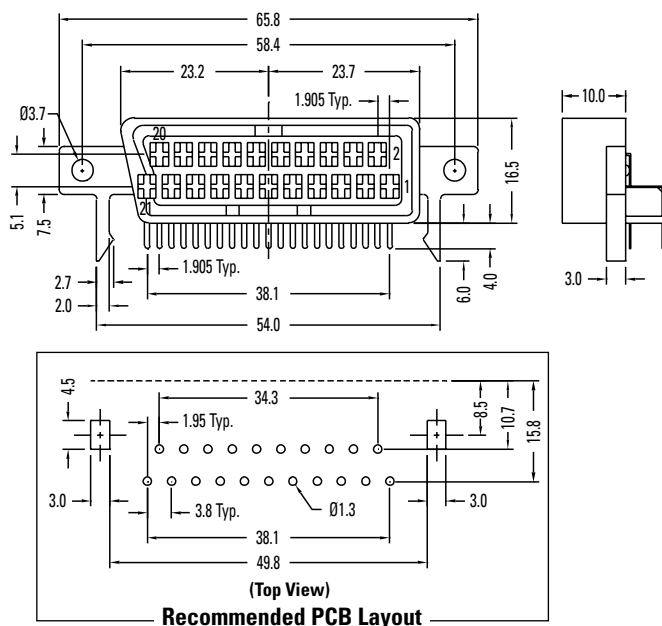
## SCART CONNECTORS

### K-SCART Series

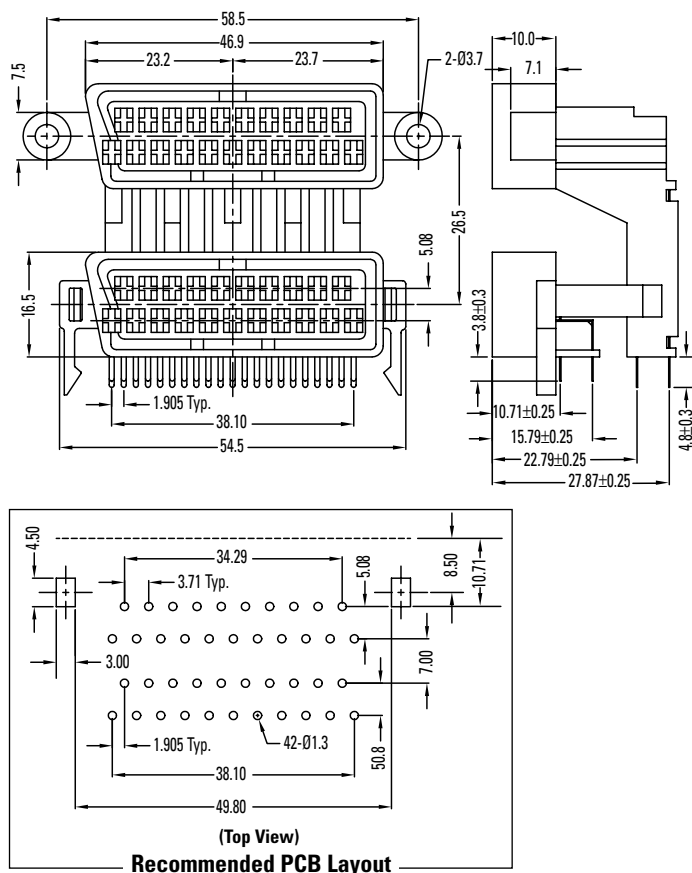
### K-SCART Series Dimensions

Dimensions in mm

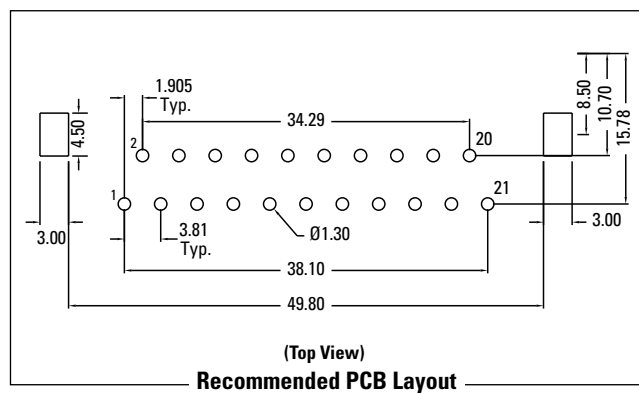
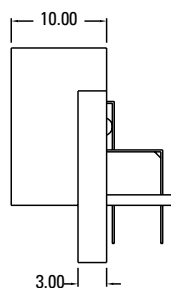
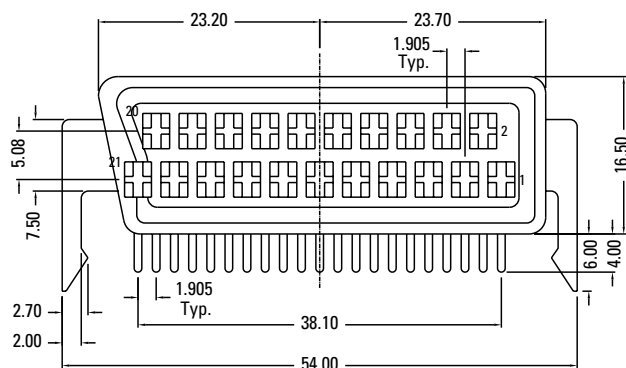
#### K-SCART-021



#### K-SCART-028A

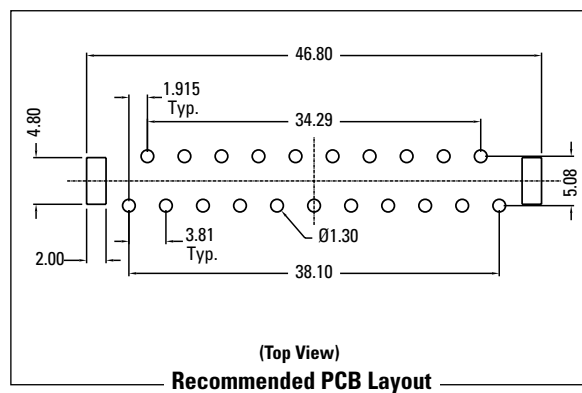
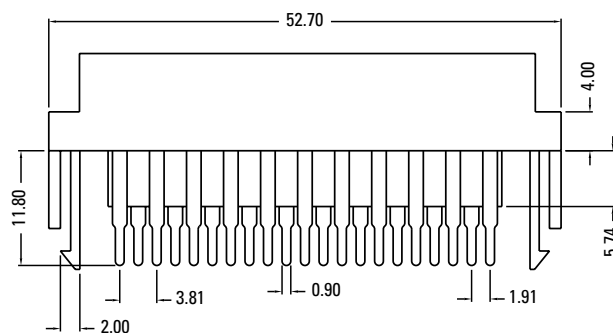
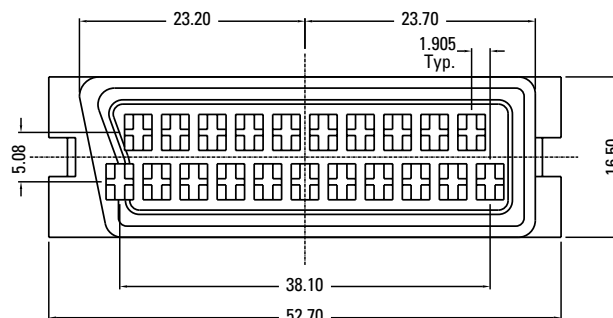


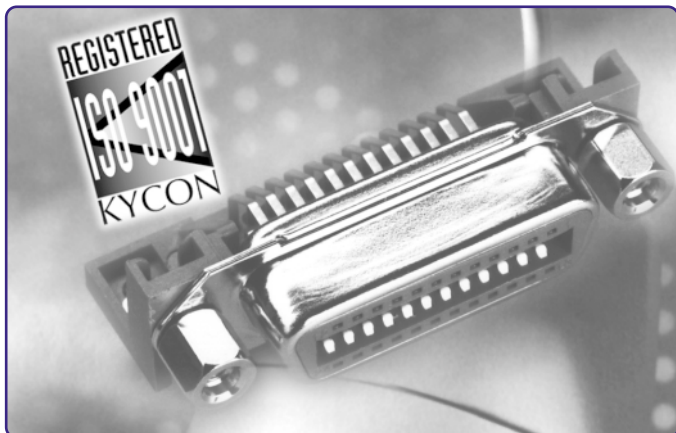
Dimensions in mm



## *K-SCART Series*

Dimensions in mm





## 37 Series Miniature Ribbon Connectors

### Features



- Applications Include Computer Peripherals, Data Processing, Telecommunications and Industrial Controls
- UL Recognized Material 
- Design Meets the Requirements of IEEE-488 and SCSI Applications
- Plug and Socket Available in 14, 24, 36, and 50 Positions
- Bright Nickel Plated Shells for EMI/RFI Shielding
- D Shaped Connector Mating and Polarization
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Shell

Steel Material, Nickel Finish

##### Insert

PBT Thermoplastic, Blue, 30% Glass Filled, Self-Extinguishing, 94V-0 Rated

##### Contact Material

Phosphor Bronze

##### Contact Finish

Gold Flash Over 0.0001 (0.00254) Nickel

## MINIATURE RIBBON CONNECTORS

### 37 Series

### Mechanical Characteristics

#### Insertion and Withdrawal Force

| Number of Contacts | Insertion Force (kg) | Withdrawal Force (kg) |
|--------------------|----------------------|-----------------------|
| 14                 | 1.4                  | 1.0                   |
| 24                 | 2.7                  | 1.9                   |
| 36                 | 3.7                  | 2.0                   |
| 50                 | 4.6                  | 4.3                   |

#### Durability

Subjected to 500 Cycles of Insertions and Withdrawals, After Test, Connectors Meet the Maximum Contact Resistance Specifications

### Electrical Characteristics

#### Contact Current Rating

5 Amps

#### Contact Resistance

Voltage Drop, at DC 5 Amps Current, Shall be 8.5 Millivolts Max

#### Dielectric Withstanding Voltage

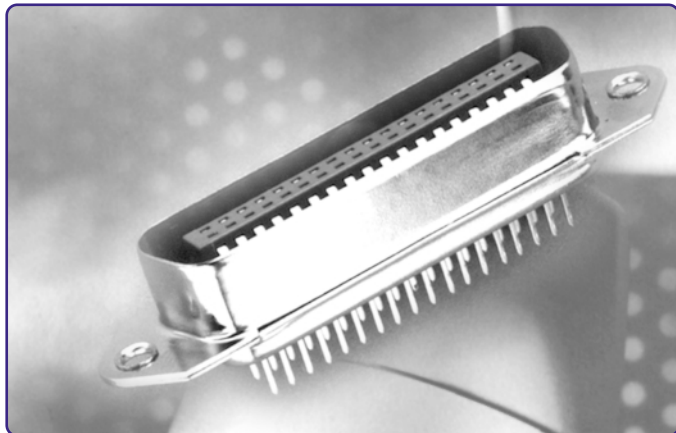
1200 V AC Min

#### Insulation Resistance

1000 Megohms Min

#### Temperature Rating

-55°C to + 105°C



## Vertical PCB Mount Miniature Ribbon Connectors

### Ordering Information

| Receptacles Without Spring Latch |             |
|----------------------------------|-------------|
| Contacts                         | Part Number |
| 14                               | 37-20140-11 |
| 24                               | 37-20240-23 |
| 36                               | 37-20360-19 |
| 50                               | 37-20500-85 |

| Receptacles With Spring Latch |             |
|-------------------------------|-------------|
| Contacts                      | Part Number |
| 14                            | 37-40140-13 |
| 24                            | 37-40240-14 |
| 36                            | 37-40360-24 |
| 50                            | 37-40500-24 |

| Plugs    |             |
|----------|-------------|
| Contacts | Part Number |
| 14       | 37-10140-10 |
| 24       | 37-10240-12 |
| 36       | 37-10360-25 |
| 50       | 37-10500-73 |

### Mounting Options

| Designator* | Description                                                           |
|-------------|-----------------------------------------------------------------------|
| - K         | 4-40 Threaded Bushings                                                |
| - KJM       | 4-40 Threaded Bushings and IEEE Standard Metric Jack Screws Installed |

### Color Option\*

|                                              |
|----------------------------------------------|
| Standard: Blue Color                         |
| BLK: Black Color (minimum order requirement) |

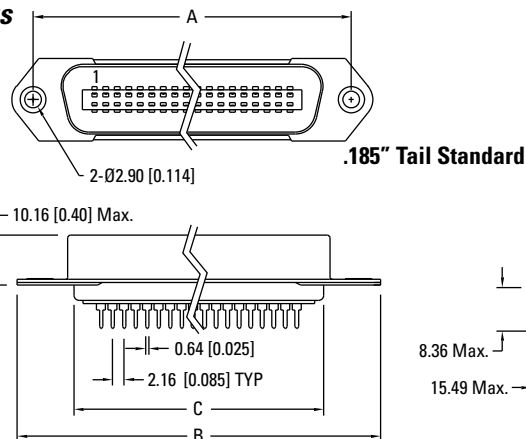
## MINIATURE RIBBON CONNECTORS

### 37 Series

### Dimensions

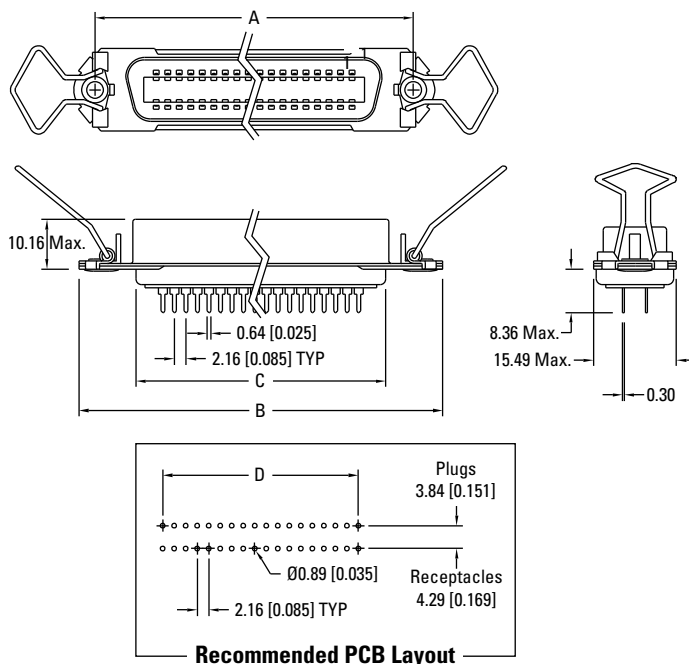
Dimensions in mm [In]

#### Plugs



#### Receptacles

Pictured with Spring Latch



|          | 14 Contacts |        | 24 Contacts |        |
|----------|-------------|--------|-------------|--------|
|          | In          | mm     | In          | mm     |
| <b>A</b> | 1.417       | 35.991 | 1.842       | 46.787 |
| <b>B</b> | 1.750       | 44.450 | 2.175       | 55.245 |
| <b>C</b> | .910        | 23.114 | 1.335       | 33.909 |

|          | 36 Contacts |        | 50 Contacts |        |
|----------|-------------|--------|-------------|--------|
|          | In          | mm     | In          | mm     |
| <b>A</b> | 2.352       | 59.741 | 2.947       | 74.854 |
| <b>B</b> | 2.685       | 68.199 | 3.280       | 83.312 |
| <b>C</b> | 1.845       | 46.863 | 2.440       | 61.976 |

\* Add to end of part number



## Right Angle PCB Mount Miniature Ribbon Connectors

### Ordering Information

|        |   |              |                |   |                       |   |                         |       |
|--------|---|--------------|----------------|---|-----------------------|---|-------------------------|-------|
| 37     | - | 92           | 500            | - | 24                    | - | XK                      | BLK   |
| Series |   | Contact Type | No of Contacts |   | Mounting Option (PCB) |   | Mounting Option (Panel) | Color |

#### Series

37 - Right Angle PCB Mount Miniature Ribbon Connector

#### Contact Type

91 - Pin Contact (Plug)

92 - Socket Contact (Receptacle)

#### Number of Contacts

240 - 24 Contacts

360 - 36 Contacts

500 - 50 Contacts

#### Mounting Option (PCB)

12 - 4-40 Riveted Threaded Mounting Holes

24 - Grounding Brackets

#### Mounting Option (Panel)

Blank - With Spring Latches\*

K - With 4-40 Riveted Threaded Inserts and Spring Latches\*

X - With Pan Head Screws installed and without Spring Latches

XK - With 4-40 Riveted Threaded Inserts and without Spring Latches

XJ - Without Spring Latches and with Jack Screws Installed\*\*

XJM - Without Spring Latches and with IEEE Standard Metric Jack Screws Installed\*\*

#### Color

Blank - Blue (Standard)

BLK - Black

\* Spring Latch Option Only Available for Receptacle

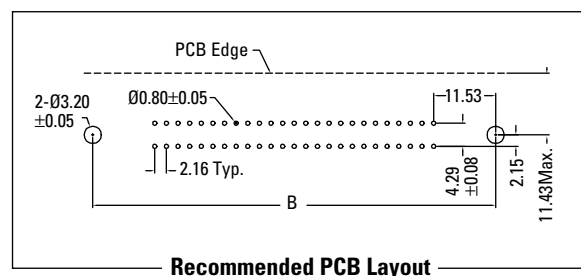
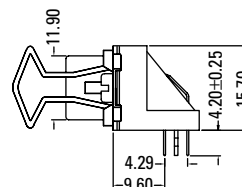
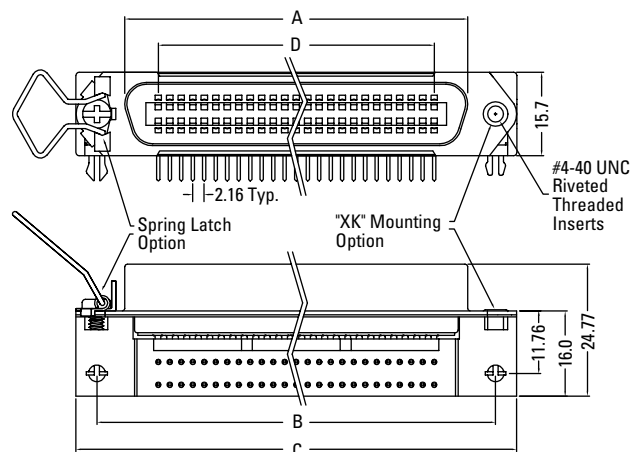
\*\* Removal of Jack Screws Will Cause Disassembly of XJ Option

## MINIATURE RIBBON CONNECTORS

### 37 Series

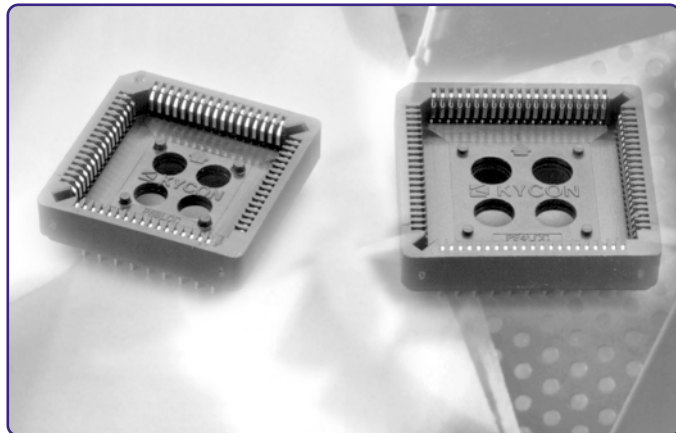
### Dimensions

Dimensions in mm



Recommended PCB Layout

| Number of Contacts (Shell Size) | Dimensions (Inch/mm) |                |                |                |
|---------------------------------|----------------------|----------------|----------------|----------------|
|                                 | A                    | B              | C              | D              |
| 24                              | 1.427<br>36.30       | 1.843<br>46.80 | 2.150<br>54.70 | .935<br>23.76  |
| 36                              | 1.941<br>49.30       | 2.350<br>59.70 | 2.638<br>67.70 | 1.446<br>36.72 |
| 50                              | 2.545<br>64.45       | 2.949<br>74.90 | 3.264<br>82.80 | 2.041<br>51.84 |



## P Series Through Hole PLCC Socket

**Features** 

- Applications Include All Electronic PC Boards Requiring the Conversion of a .050" Pitch Chip Carrier to a .100" x .100" Grid Through Board Application
- Accepts Molded Plastic Chip Carriers Conforming to JEDEC Specification MO-047 for Square and MO-052 for Rectangular Configuration
- Visual and Mechanical Polarization for PLCC Insertion
- Closed Bottom for Excellent Protection from Solder Wicking Into Contact Area
- Molded-In Stand-Offs Allow Easy Removal of Flux Residue
- Extraction Tool Slots\*
- Open Top Design for Cooler Running Chip Carrier
- Automatic Insertion Machine Compatible
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials and Finish

##### Body

LCC: PBT Thermoplastic, 30% Glass Filled,   
UL94V-0 Rated, Black Color

LCC-1: PPS Thermoplastic, 40% Glass Filled,  
UL94V-0 Rated, Brown Color

##### Contact Material

Phosphor Bronze

##### Contact Finish

Copper Alloy, Tin Plated

### Electrical Characteristics

**Contact Current Rating:** 1 Amp

**Contact Resistance:** 30 Milliohms Max.

**Dielectric Withstanding Voltage:** 500V AC Min. for 1 Minute

**Insulation Resistance:** 1000 Megohms Min.

**Temperature Rating:** -55°C to +105°C

\* PLCC Extraction Tool P/N TLP-PLCC

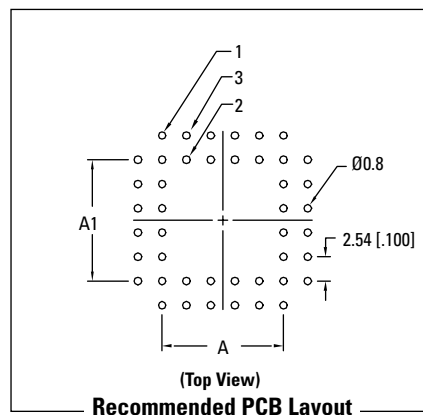
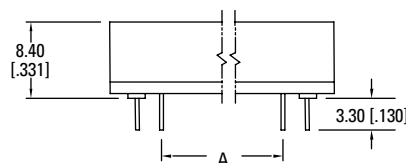
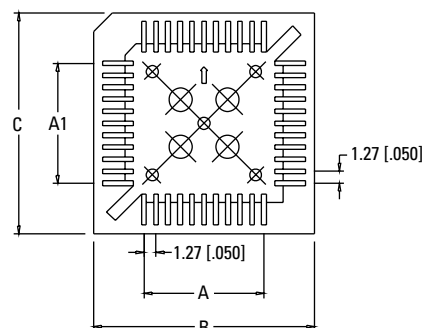
## CHIP CARRIER SOCKETS

### P Series

### Ordering Information

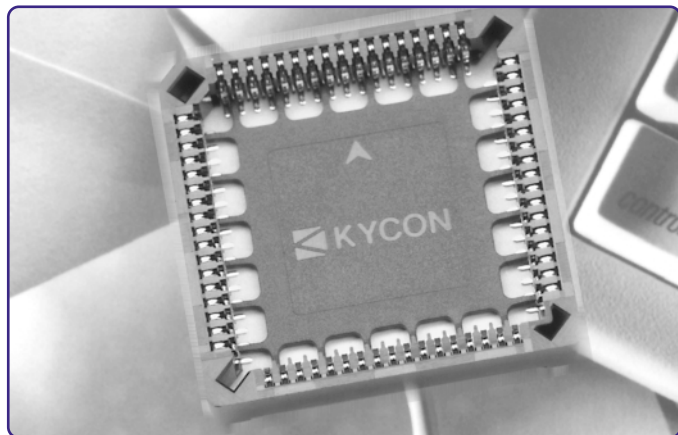
|        |   |                    |                        |
|--------|---|--------------------|------------------------|
| P      | — | 44                 | LCC                    |
| Series |   | Number of Contacts | LCC: PBT<br>LCC-1: PPS |

### Dimensions



Dimensions in mm [In]

| Number of Contacts | A<br>±0.1 | A1<br>±0.1 | B<br>±0.2 | C<br>±0.2 |
|--------------------|-----------|------------|-----------|-----------|
| 20                 | 5.08      | 5.08       | 15.56     | 15.56     |
| 28                 | 7.62      | 7.62       | 17.78     | 17.78     |
| 32                 | 7.62      | 10.16      | 18.10     | 20.64     |
| 44                 | 12.70     | 12.70      | 23.58     | 23.58     |
| 52                 | 15.24     | 15.24      | 25.72     | 25.72     |
| 68 - PBT           | 20.32     | 20.32      | 31.80     | 31.80     |
| 68 - PPS           | 20.32     | 20.32      | 31.10     | 31.10     |
| 84 - PBT           | 25.40     | 25.40      | 36.70     | 36.70     |
| 84 - PPS           | 25.40     | 25.40      | 36.00     | 36.00     |



## SMP Series Slim Design Surface Mount PLCC Socket

### Features



- Applications Include All Electronic PC Boards Requiring Use of a Socket with Same Footprints as Most Common Plastic Leaded Chip Carriers
- Accepts Molded Plastic Chip Carriers Conforming to JEDEC Specification MO-047 for Square and MO-052 for Rectangular Configuration
- Visual and Mechanical Polarization for PLCC Insertion
- Open Frame Design for Ease of Contact Inspection and Repair
- Optional PCB Polarizing Pegs Available
- Slimmer Design Saves on Board Space
- Extraction Tool Slots\*
- Open Top Design for Cooler Running Chip Carrier
- Automatic Insertion Machine Compatible
- CSA/NRTL Certified File No. LR78160

### Performance Specifications

#### Materials

##### Body

PPS Thermoplastic, UL94V-0 Rated, Brown Color 

##### Contact Material

Phosphor Bronze

##### Contact Finish

Tin Over Nickel Plating

### Electrical Characteristics

**Contact Current Rating:** 1 Amp

**Contact Resistance:** 15 Milliohms Max.

**Dielectric Withstanding Voltage:** 1000 V AC Min. for 1 Minute

**Insulation Resistance:** 1000 Megohms Min.

**Operating Temperature:** -55°C to +105°C

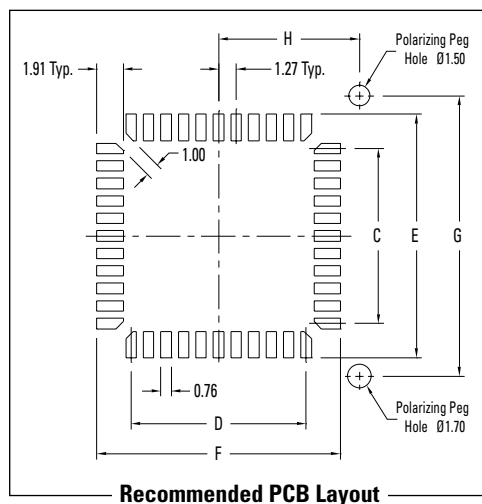
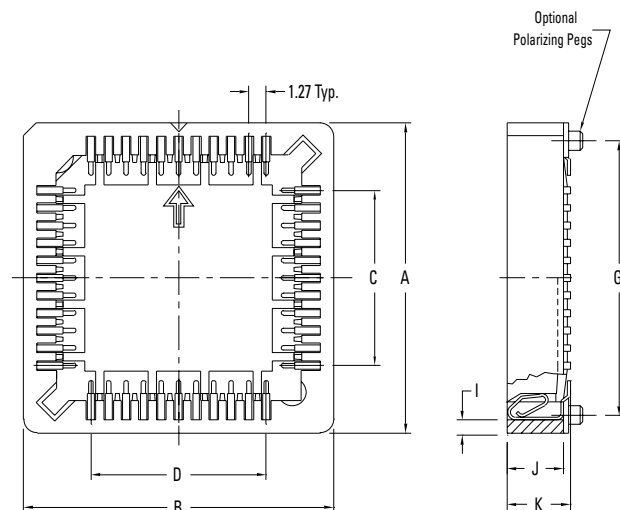
\*PLCC Extraction Tool P/N TLP-PLCC

## CHIP CARRIER SOCKETS

### SMP Series

### Ordering Information

| SMP    | 68                 | LCC2 | N                                |                                                |
|--------|--------------------|------|----------------------------------|------------------------------------------------|
| Series | Number of Contacts |      | N: Non Polarized<br>P: Polarized | Packaging<br>Blank: Tubes<br>TR: Tape and Reel |



Dimensions in mm

| No. of Cont. | A     | B     | C     | D     | E     | F     | G     | H     | I    | J    | K    |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 20           | 14.86 | 14.86 | 5.08  | 5.08  | 10.03 | 10.03 | 12.70 | 6.35  | 0.94 | 4.10 | 4.60 |
| 28           | 17.40 | 17.40 | 7.62  | 7.62  | 12.57 | 12.57 | 15.24 | 7.62  | 0.95 | 4.10 | 4.60 |
| 32           | 19.45 | 16.90 | 10.16 | 7.62  | 15.11 | 12.57 | 17.78 | 7.62  | 0.70 | 3.83 | 4.27 |
| 44           | 22.48 | 22.48 | 12.70 | 12.70 | 17.65 | 17.65 | 20.32 | 10.16 | 0.95 | 4.10 | 4.60 |
| 52           | 25.40 | 25.40 | 15.24 | 15.24 | 20.19 | 20.19 | 22.86 | 11.43 | 1.10 | 4.10 | 4.60 |
| 68           | 30.54 | 30.54 | 20.32 | 20.32 | 25.27 | 25.27 | 27.94 | 13.97 | 1.17 | 4.10 | 4.60 |
| 84           | 35.56 | 35.56 | 25.40 | 25.40 | 30.35 | 30.35 | 33.02 | 16.15 | 1.12 | 4.10 | 4.60 |

# INDEX

## Catalog #16

| Part Number | Page Number | Part Number      | Page Number |
|-------------|-------------|------------------|-------------|
| 37          | 136         | KFWS-V           | 45          |
| GA          | 79          | KHDS             | 131         |
| GDA         | 73          | KLD              | 120         |
| GDL         | 68          | KLD (Mini)       | 123         |
| GDLF        | 70          | KLD-SMT          | 121         |
| GDP         | 74          | KLD-SMT (Mini)   | 124         |
| GIS         | 52          | KLD-SMT2         | 122         |
| GL          | 72          | KLDP             | 127         |
| GM          | 60          | KLDV             | 125         |
| GM-SMT2     | 62          | KLDV-SMT         | 126         |
| GMI         | 57          | KLP              | 116         |
| GP          | 79          | KLP42            | 117         |
| GS          | 66          | KLPHT            | 116         |
| GSG         | 76          | KMB (mini)       | 43          |
| GSP         | 55          | KMDG             | 84          |
| JS          | 38          | KMDG (stacked)   | 88          |
| K-SCART     | 134         | KMDGHT           | 84          |
| K202HT      | 5           | KMDGHT (stacked) | 88          |
| K22         | 6           | KMDLA            | 95          |
| K22HT       | 6           | KMDPL            | 94          |
| K31         | 10          | KMDT             | 90          |
| K31HT       | 10          | KMDVL            | 92          |
| K42         | 22          | KPJ              | 128         |
| K44         | 7           | KPP              | 128         |
| K61         | 12          | KUSB             | 40          |
| K61HT       | 12          | KUSBV            | 42          |
| K66         | 8           | KVI              | 46          |
| K66 VESA    | 8           | MP               | 82          |
| K77         | 48          | MPS              | 82          |
| K85         | 15          | P                | 139         |
| K85R1       | 13          | SMP              | 140         |
| K85R2       | 13          | ST-2000          | 100         |
| K86         | 16          | ST-2500          | 100         |
| K88         | 18          | ST-2550          | 101         |
| K99         | 19          | ST-3000          | 102         |
| KCD         | 96          | ST-3081          | 104         |
| KDM         | 132         | ST-3100          | 105         |
| KF22        | 28          | ST-3120          | 107         |
| KF42        | 31          | ST-314           | 110         |
| KF44        | 29          | ST-315           | 110         |
| KF66        | 30          | ST-3200          | 108         |
| KF85        | 32          | ST-3500          | 103         |
| KF86        | 33          | ST-3900          | 112         |
| KF88        | 34          | ST-4235          | 113         |
| KFMDG       | 85          | STP-3501         | 115         |
| KFWS-SMT    | 44          |                  |             |

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