FEATURES & BENEFITS

- **COTS Plus solution**
  - Hard metric connectors for Compact PCI applications
  - Intermateable with standard 2 mm Hard Metric connectors
  - Bifurcated contact system
  - Available in 55, 110 and 125 pin straight and right angle versions

- **1.27 µm gold contacts**
  - Enhanced gold plated contacts increase the Mean Time Between Failure (MTBF) compared to standard COTS 2 mm Hard Metric connectors
  - Optimized durability
  - Improved contact resistance stability and immunity to shock and vibration fretting

- **Lubricant-free contact system**
  - Electrical stability over wider range of environmental exposures
  - Reduced contamination

- **AS9100 certified**
  - Additional site audits or inspections not required
  - Integrity of product and processes

- **Lower system cost of ownership**
  - Robust in harsh environments
  - Long contact life
  - Accommodates existing board layout, tooling and process

TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Quality Conformance Inspections</th>
<th>MIL-DTL-55302</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Criteria</td>
<td>IEC 61076-4-101</td>
</tr>
<tr>
<td>Contact Spacing</td>
<td>0.079 [2.00]</td>
</tr>
<tr>
<td>Suggested PCB Hole Diameter</td>
<td>0.024 [0.60] ± 0.002 [0.05] after plating</td>
</tr>
</tbody>
</table>

MECHANICAL & ENVIRONMENTAL

- Insulation Resistance: > 10,000 MΩ
- Low Level Contact Resistance: 20 mΩ max
- Mating Force: 0.17 LBF per mating contact
- Contact Life Cycle: 200 per mated connector pair
- Temperature Rating: -55° C to 125° C
- Flammability Rating: UL 94V0
- Mechanical Shock: 30 G peak value (GR-1217-CORE Telecordia)
- Vibration: 10-500 Hz @ 10 G (GR-1217-CORE Telecordia)

MATERIALS & FINISHES

- **Insulator**
  - Female housing: PBT UL94 V-0
  - Male housing: PBT UL94 V-0
  - Wafer: LCP UL94 V-0

- **Contact**
  - Copper alloy

- **Mating Contact Plating**
  - 1.27 µm [50 µin] gold min. over 1.27 µm [50 µin] nickel min.
  - 2.50 µm [98 µin] tin min. over 1.27 µm [50 µin] nickel min.

ELECTRICAL

- **Current Rating**: 1.0 A @ 20°C
- **Voltage Rating**: 500 VAC
- **Dielectric Withstanding Voltage**: 1000V RMS

Dimensions are in mm [inches] | All specifications are subject to change without notice
DIMENSIONS
55, 110 & 125 Way Connectors

- **55-WAY MALE**
  Type C, Straight

  **STRAIGHT**
  P/N: K3C055MS0P1230

  ![Diagram of Straight 55-Way Male Connector](image1)

  **STRAIGHT WITH PEG**
  P/N: K3C055MS1P1230

  ![Diagram of Straight with Peg 55-Way Male Connector](image2)

- **55-WAY FEMALE**
  Type C, Straight & Right Angle

  **STRAIGHT**
  P/N: K3C055FS0P1430

  ![Diagram of Straight 55-Way Female Connector](image3)

  **RIGHT ANGLE**
  P/N: K3C055FR0P1430

  ![Diagram of Right Angle 55-Way Female Connector](image4)

Dimensions are in mm [inches] | All specifications are subject to change without notice
110-WAY MALE
Type A, Straight

STRAIGHT
P/N: K3A110MS0P1230

STRAIGHT WITH PEG
P/N: K3A110MS1P1230

110-WAY FEMALE
Type A, Straight & Right Angle

STRAIGHT
P/N: K3A110FS0P1430

RIGHT ANGLE
P/N: K3A110FR0P1430
125-WAY MALE
Type B, Straight

125-WAY FEMALE
Type B, Straight & Right Angle
## HOW TO ORDER

1. **CONNECTOR SERIES** *(Fixed)*  
   K3  AURORA SERIES

2. **CONNECTOR TYPE** *(Fixed)*  
   A MULTI-PURPOSE CENTER  
   B WITHOUT MULTI-PURPOSE CENTER  
   C END MODULE

3. **NUMBER OF CONTACTS** *(Fixed)*  
   0 55 CONTACTS  
   110 CONTACTS  
   125 CONTACTS

4. **CONNECTOR GENDER**  
   M MALE  
   F FEMALE

5. **TERMINATION STYLE**  
   S STRAIGHT  
   R RIGHT ANGLE

6. **ALIGNMENT PEG**  
   0 WITHOUT PEG  
   1 WITH PEG

7. **TERMINATION** *(Fixed)*  
   P PRESS-IN

8. **TERMINATION LENGTH** *(Fixed)*  
   1 3.10 mm (RIGHT ANGLE) OR 3.70 mm (STRAIGHT)

9. **SIGNAL PIN LENGTH X SHIELDING PINS LENGTH** *(Fixed)*  
   2 9.75 mm  
   4 FEMALE

10. **PLATING**  
    3 1.27 µm [50 µin] (MIN) GOLD OVER 1.27-2.54 µm [50-100 µin] (MIN) NICKEL ON MATING CONTACT SURFACES  
    2.54-5.08 µm [100-200 µin] (MIN) TIN OVER 1.27-3.81 µm [50-150 µin] (MIN) NICKEL ON PCB TERMINATION

11. **SHIELD**  
    0 NO SHIELD

12. **VERSION** *(Female Only)*  
    1 BOARD-TO-BOARD DISTANCE: 15-16.5 mm

### Notes:
1) For specific options, please consult factory.