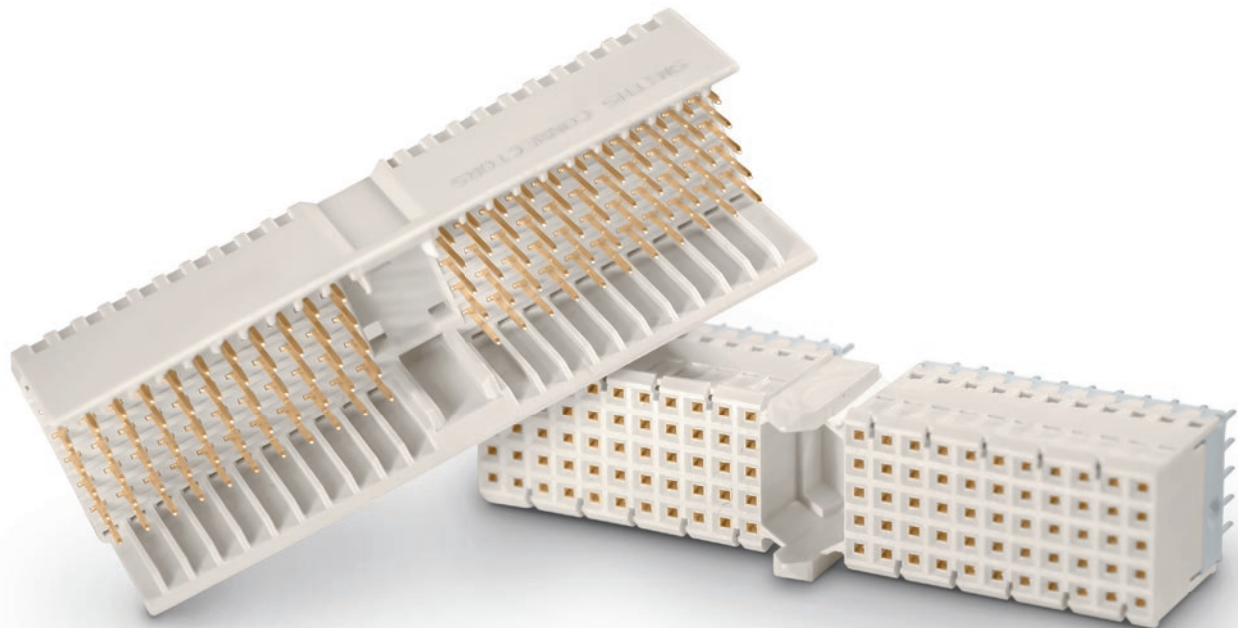


AURORA CONNECTOR SERIES

2 mm Hard Metric Connector System



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

Quality Conformance Inspections	MIL-DTL-55302
Design Criteria	IEC 61076-4-101
Contact Spacing	0.079 [2.00]
Suggested PCB Hole Diameter	0.024 [0.60] ± 0.002 [0.05] after plating

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.
Press Fit PCB Termination	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

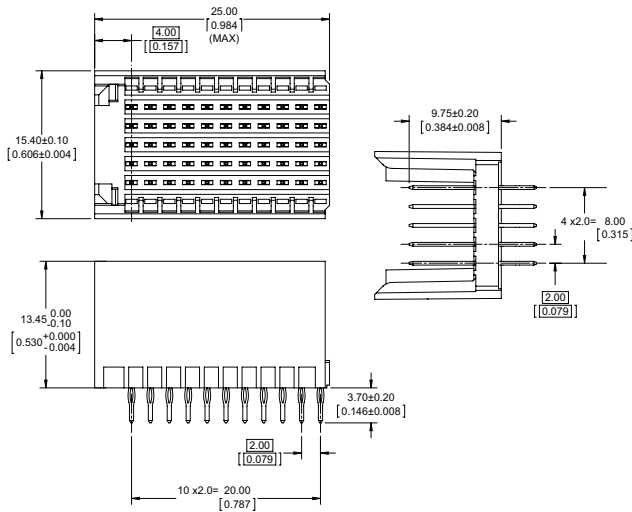
55, 110 & 125 Way Connectors

► 55-WAY MALE

Type C, Straight

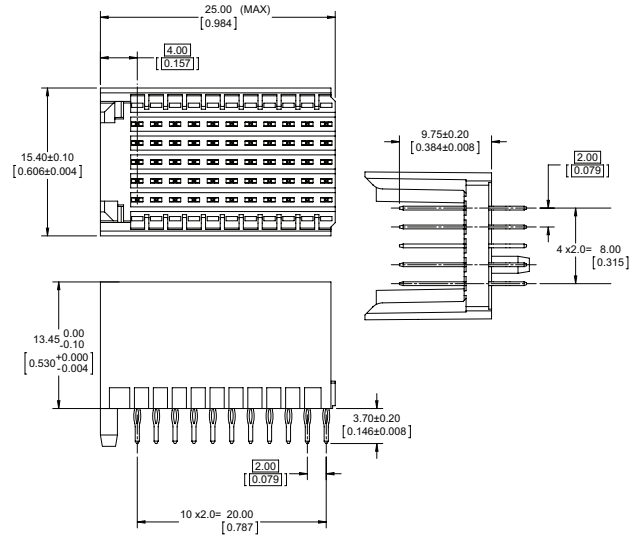
STRAIGHT

P/N: K3C055MS0P1230



STRAIGHT WITH PEG

P/N: K3C055MS1P1230

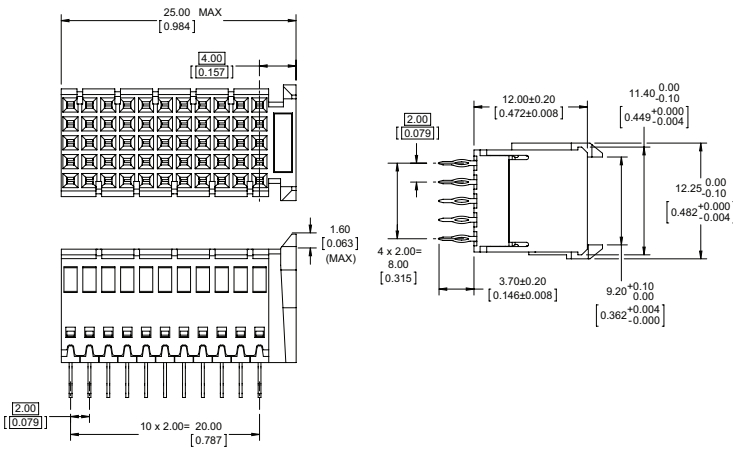


► 55-WAY FEMALE

Type C, Straight & Right Angle

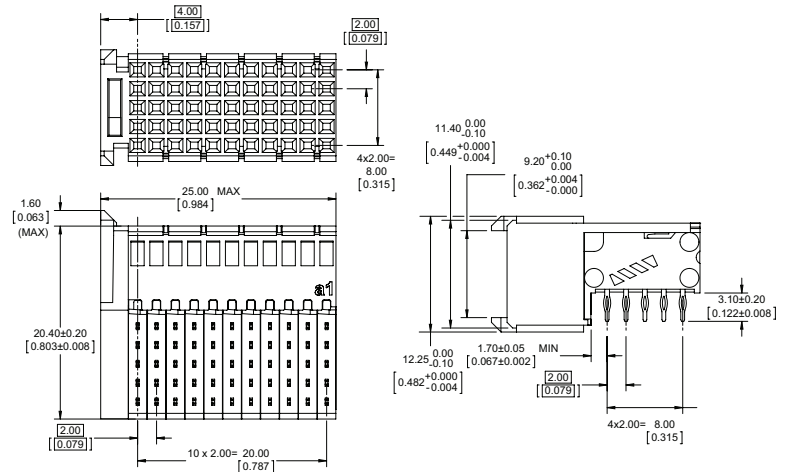
STRAIGHT

P/N: K3C055FS0P14301



RIGHT ANGLE

P/N: K3C055FR0P1430

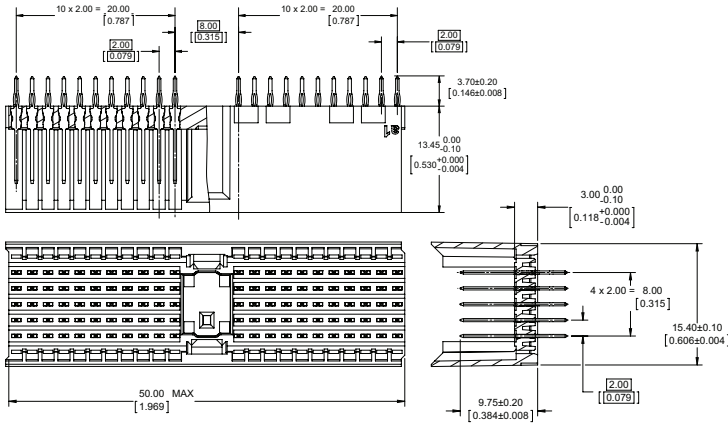


► **110-WAY MALE**

Type A, Straight

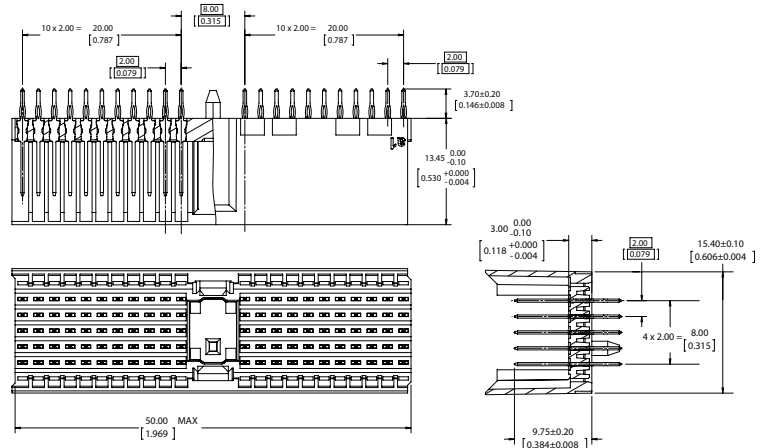
STRAIGHT

P/N: K3A110MS0P1230



STRAIGHT WITH PEG

P/N: K3A110MS1P1230

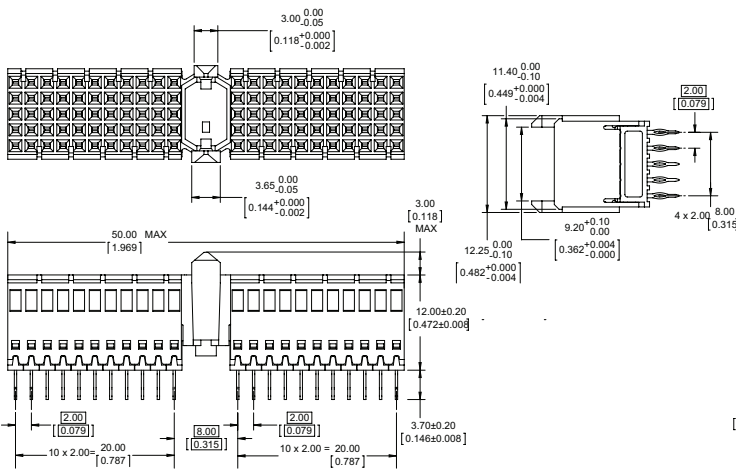


► **110-WAY FEMALE**

Type A, Straight & Right Angle

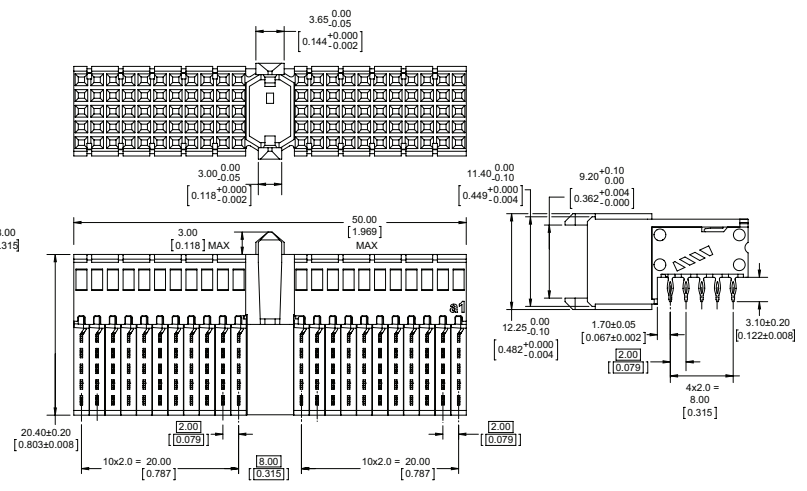
STRAIGHT

P/N: K3A110FS0P14301



RIGHT ANGLE

P/N: K3A110FR0P1430

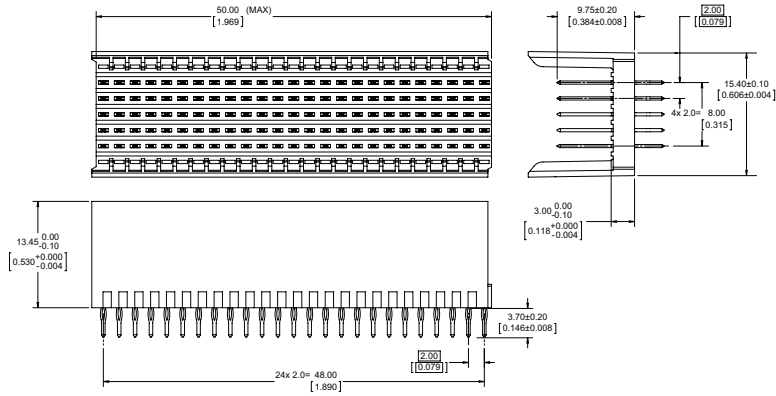


► 125-WAY MALE

Type B, Straight

STRAIGHT

P/N: K3B125MS0P1230

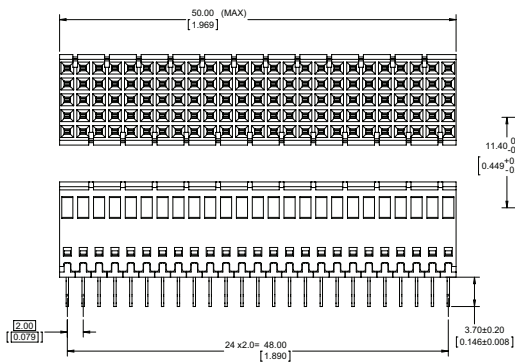


► 125-WAY FEMALE

Type B, Straight & Right Angle

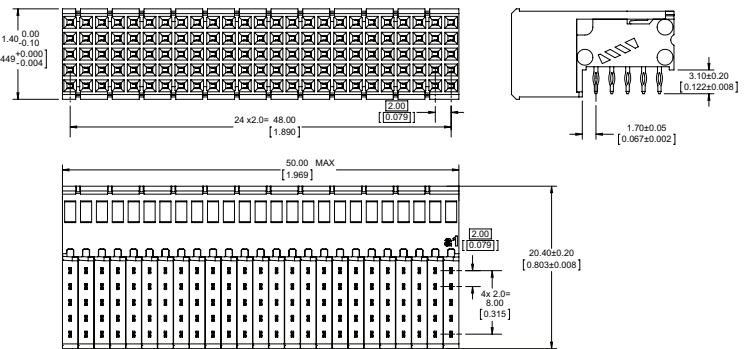
STRAIGHT

P/N: K3B125FS0P14301

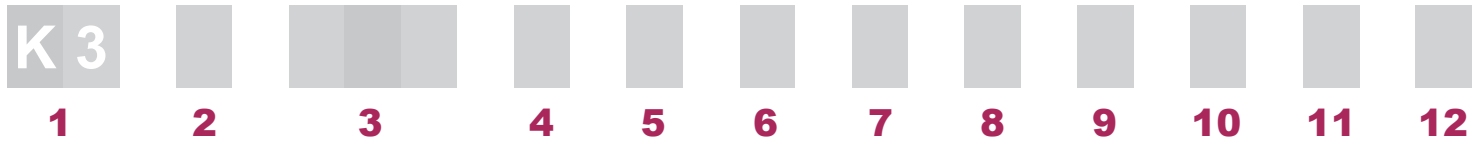


RIGHT ANGLE

P/N: K3B125FR0P1430



HOW TO ORDER

**1** ▶ **CONNECTOR SERIES** *(Fixed)*

K 3 AURORA SERIES

2 ▶ **CONNECTOR TYPE**⁽¹⁾

A MULTI-PURPOSE CENTER B WITHOUT MULTI-PURPOSE CENTER C END MODULE

3 ▶ **NUMBER OF CONTACTS**⁽¹⁾

0 5 5 55 CONTACTS 1 1 0 110 CONTACTS 1 2 5 125 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**⁽¹⁾

P PRESS-IN

8 ▶ **TERMINATION LENGTH**⁽¹⁾

1 3.10 mm (RIGHT ANGLE) OR 3.70 mm (STRAIGHT)

9 ▶ **SIGNAL PIN LENGTH X SHIELDING PINS LENGTH**⁽¹⁾

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**⁽¹⁾ *(Female Only)*

1 BOARD-TO-BOARD DISTANCE: 15-16.5 mm

Notes:

1) For specific options, please consult factory