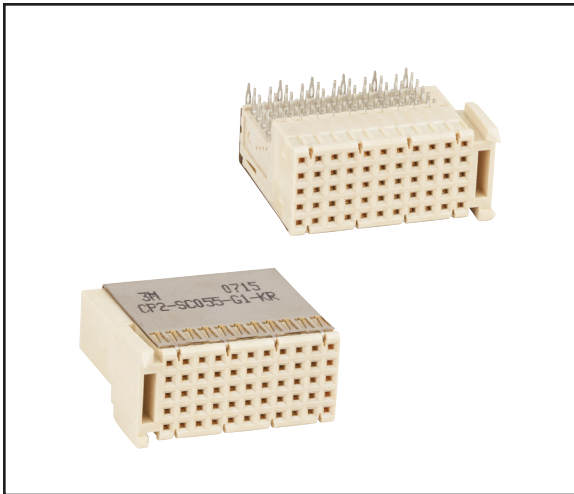


# 3M™ CP2 Press-Fit Socket

2 mm Type C, 55 Signal Contacts, Left Guidance, Right Angle

CP2 Series



- 25 mm basic system unit
- 20 mm module
- Designed according to IEC 61076-4-101 and IEC 917 Standards
- 2 mm grid spacing allows for high signal density at low cost
- “Eye of the Needle” compliant pin press-fit design helps reduce manufacturing time and cost
- Additional grounding rows available for improved ground bounce and EMI immunity
- Mates with 5 row 3M™ HM and CP2 Headers
- End-to-end stackable with 5 row 3M™ HSHM, UHM, HM and CP2 Sockets
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: July 15, 2015

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Sheet 1 of 2

## Physical

### Insulation:

Material: High Temperature Thermoplastic (LCP)  
Flammability: UL94V-0

### Contact:

Material: Copper Alloy  
Plating: See Ordering Information

## Mechanical

Mating Force:  $\leq 0.75\text{N/PIN}$   
Withdrawal Force:  $\geq 0.15\text{N/PIN}$   
Mating and Un-mating Operations 200 for KR plating

## Electrical

Current Rating: 1.0 Amperes at 70°C with all contacts powered  
Contact Resistance:  $\leq 20\text{ m}\Omega$   
Insulation Resistance:  $\geq 10,000\text{ M}\Omega$   
Test Voltage: 750 VAC<sub>RMS</sub>

## Environmental

Temperature Ratings: -55°C to +125°C

## PCB Data

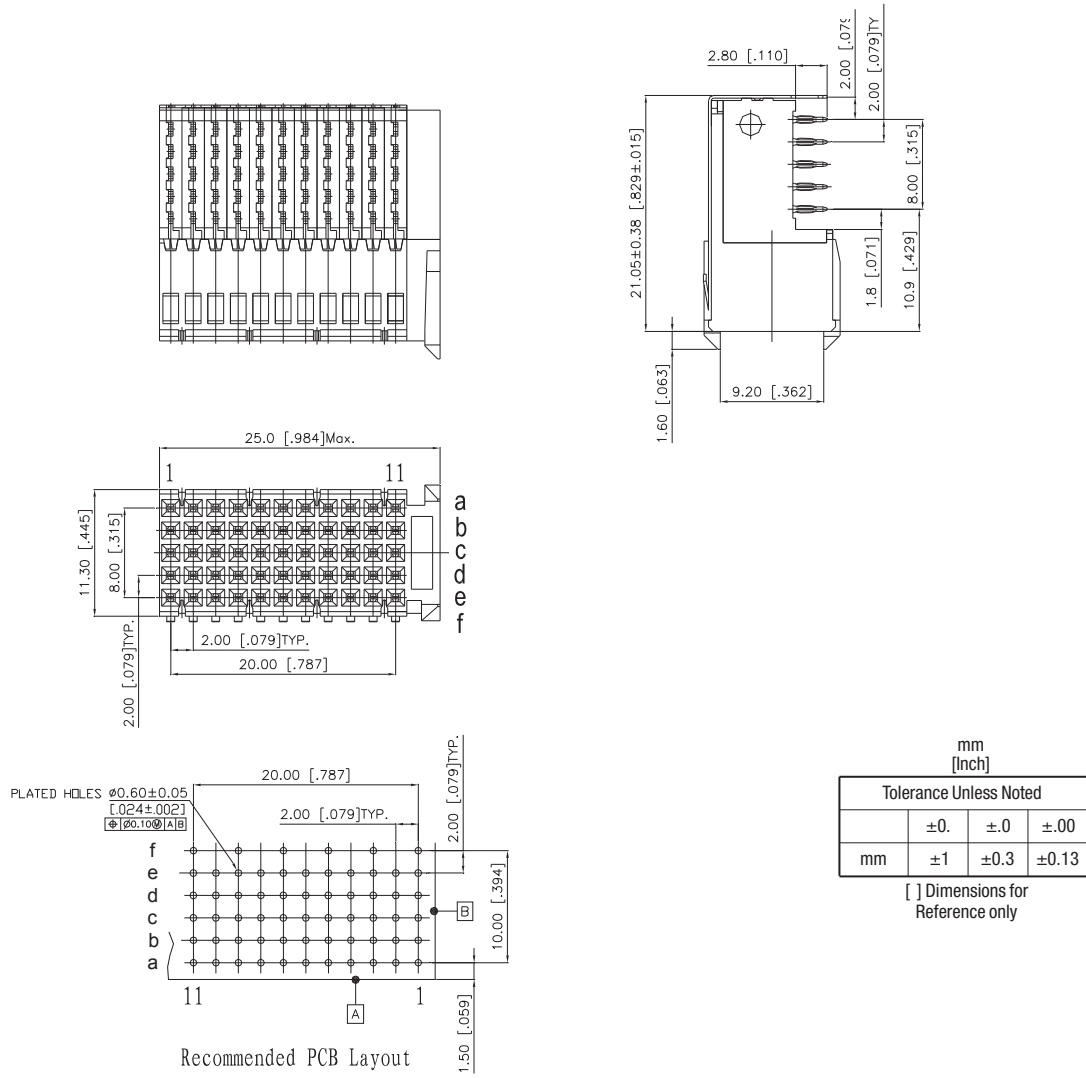
Recommended PCB Plated Through Hole:  $\varnothing 0.6 \pm 0.05\text{ mm}$   
Drill hole diameter  $\varnothing 0.7 \pm 0.02\text{ mm}$   
Hole platings Cu 25~50  $\mu\text{m}$ , Sn<10  $\mu\text{m}$   
PCB thickness: 2.4 - 5.6 mm for 3.7 mm tails, 1.4 - 5.6 mm for 2.3 mm tails  
Press-In Force:  $\leq 204\text{ N/pin}$  on nominal hole diameter  
Retention Force:  $\geq 13.5\text{ N/pin}$  on nominal hole diameter



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mm [Inch]			
Tolerance Unless Noted			
	±0.	±.0	±.00
mm	±1	±.3	±0.13

[ ] Dimensions for Reference only

## Ordering Information

**CP2-SC055-X1-XXXX**

- Shield Options:
  - G = Upper Shield
  - Blank = No Shield
- Plating Options
  - FJ = 10 ~ 20 μ" Gold Contact Area  
100 ~ 200 μ" Matte Tin  
50 ~ 80 μ" Nickel Underplate  
(RIA E1 & C1 apply)
  - KR = 30 ~ 40 μ" Gold Contact Area  
100 ~ 200 μ" Matte Tin  
50 ~ 80 μ" Nickel Underplate  
(RIA E1 & C1 apply)

• This diagram serves only for Part Number descriptive definitions.  
PLEASE CONTACT YOUR LOCAL SALES REPRESENTATIVE FOR CUSTOMER SPECIFIC PRODUCT CONFIGURATIONS.

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Unless otherwise noted, references to industry specifications are intended to indicate substantial compliance to the material elements of the specification. Such references should not be construed as a guarantee of compliance to all requirements in a given specification.

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