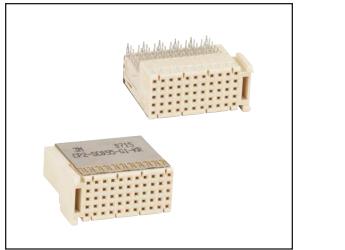
# 3M<sup>™</sup> CP2 Press-Fit Socket

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



- 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<sup>™</sup> HM and CP2 Headers
- End-to-end stackable with 5 row 3M<sup>™</sup> HSHM, UHM, HM and CP2 Sockets
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: July 15, 2015	TS-2269-B Sheet 1 of 2
	Sileet I UI 2

## **Physical**

### Insulation:

Material: High Temperature Thermoplastic (LCP) Flammability: UL94V-0 **Contact:** Material: Copper Alloy Plating: See Ordering Information

### **Mechanical**

Mating Force: ≤0.75N/PIN Withdrawal Force: ≥0.15N/PIN Mating and Un-mating Operations 200 for KR plating

## Electrical

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

## Environmental

Temperature Ratings: -55°C to +125°C

## **PCB** Data

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

## 3M<sup>™</sup> CP2 Press-Fit Socket 2 mm Type C, 55 Signal Contacts, Left Guidance, Right Angle

#### 076 T[970.] 2.80 [.110] 2.00 00.0 $\oplus$ .05±0.38 [.829±.015] 8.00 10.9 [.429] .071] . 80 5 1.60 [.063] 9.20 [.362] 25.0 [.984]Max 11 а 11.30 [.445] .315] b c d <u>BEREBERE BEREBERE</u> 8.00 ABABABABABA ABABABABABA ALIANA e f 77 2.00 [.079]TYP 2.00 [.079]TYP. 20.00 [.787] mm 2.00 [.079]TYP. [Inch] 20.00 [.787] PLATED HOLES <u>00.60±0.05</u> [.024±.002] (+)00.100[A]B **Tolerance Unless Noted** 2.00 [.079]TYF ±0. ±.0 ±.00 f ±1 ±0.3 ±0.13 mm е 10.00 [.394] [] Dimensions for d Reference only в С b а 11 1 [059] A 1.50 Recommended PCB Layout **Ordering Information** CP2-SC055-X1-XXXX **Plating Options** $FJ=~10\sim 20\,\mu^{\prime\prime}\, \text{Gold Contact Area}$ $10 \sim 200 \mu$ " Matte Tin $50 \sim 80 \mu$ " Nickel Underplate (RIA E1 & C1 apply) Shield Options: $KR=~30\sim 40~\mu^{\prime\prime}$ Gold Contact Area G = Upper Shield 100 ~ 200 µ" Matte Tin $50 \sim 80 \,\mu$ " Nickel Underplate Blank = No Shield (RIA E1 & C1 apply) • This diagram serves only for Part Number descriptive definitions. TS-2269-B PLEASE CONTACT YOUR LOCAL SALES REPRESENTATIVE FOR CUSTOMER SPECIFIC PRODUCT CONFIGURATIONS. Sheet 2 of 2

### ЗМ

Electronics Materials Solutions Division Interconnect Solutions http://www.3Mconnectors.com

### 3M is a trademark of 3M Company.

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.

### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

### Warranty; Limited Remedy; Limited Liability

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any direct, indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.** 



Electronics Materials Solutions Division 6801 River Place Blvd. Austin, TX 78726-9000 U.S.A. 1-800-225-5373 www.3Mconnectors.com

Please recycle. Printed in USA. © 3M 2015. All rights reserved. RIA-2217A-E