

# 3M™ Tripolarized Wiremount Socket

.050" × .100" for .025" Pitch Cable

820 Series



- Tripolarized for robust alignment when mating to 810 Series Header
- 50 mil × 100 mil halves the connector length vs. traditional 100 mil x 100 mil products
- Hill-n-dale design provides a high performance IDC termination and improved signal integrity vs. planar terminated connectors
- Beryllium Copper alloy contacts for superior strength and reliability
- Metal cover latch for positive cover retention and long term reliability
- Metal strain relief for increased reliability and durability
- Contacts: 20, 26, 36, 40, 50, 60, 68, 80 and 100
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information

Date Modified: January 11, 2011

TS-0254-C  
Sheet 1 of 2

## Physical

### Insulation:

Material: Glass Filled Polyester (PBT)

Flammability: UL 94V-0

Color: Gray

**Contact Material:** Beryllium Copper Alloy

### Plating:

Underplating: 100 μ" [2.54 mm] Nickel

U-Slot: Matte Tin or tin-lead (see ordering information)

Wiping Area: 30 μ" [0.76 mm] Gold

**Wire Accommodation** 30 AWG Solid, 30 AWG Pleated Foil, and 30 AWG Stranded, PVC, TPE, FEP

**Marking:** 3M Logo and Orientation Triangle

**Mating Compatibility:** 810 Series (TS-0253)

## Electrical

**Current Rating:** 3.00 A, 1 Contact Powered  
2.00 A, 4 Contacts Powered  
0.75 A, All Contacts Powered

Rating Conditions: EIA-364-070 Method 2, 30 degrees C maximum temperature rise, 20% derated. Reference appropriate 3M Product Specification for detailed current derating curves.

**Insulation Resistance:**  $> 1 \times 10^9 \Omega$  at 500 V<sub>DC</sub>

**Withstanding Voltage:** 500 V<sub>RMS</sub> at Sea Level

## Environmental

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

UL File No.: E68080

**3M**  
Electronic Solutions Division  
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**800-225-5373**

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**Table 1**

Contact Quantity	Dimensions	
	A	B
020	.755 [ 19.18 ]	.670 [ 17.02 ]
026	.905 [ 22.99 ]	.820 [ 17.02 ]
036	1.155 [ 29.34 ]	1.070 [ 27.18 ]
040	1.255 [ 31.88 ]	1.170 [ 29.72 ]
050	1.505 [ 38.23 ]	1.420 [ 36.07 ]
060	1.755 [ 44.58 ]	1.670 [ 42.42 ]
068	1.955 [ 49.66 ]	1.870 [ 47.50 ]
080	2.255 [ 57.28 ]	2.170 [ 55.12 ]
100	2.755 [ 69.98 ]	2.670 [ 67.82 ]

**Assembled Height**

Tolerance Unless Noted			
	.0	.00	.000
Inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only

**Notes:**  
 1. This polarization slot does not exist on the 20 position socket.  
 2. Recommended to be mated to the .050" X .100" 810XX series headers.

### Ordering Information

**Socket**  
**82XXX - 600X - XX**

Contact Quantity (See Table 1) → **82XXX**  
 Strain Relief:  
 0 = No Strain Relief  
 6 = With Strain Relief → **600X**  
 Plating suffix:  
 blank = tin lead U slots (App. E3 & C2 Apply)  
 RB = matte Sn U slots (App. E1 & C1 Apply) [Standard] → **XX**

**Strain Relief**  
 (If Ordered Separately)  
**3858-XXX**

Contact Quantity: See Table → **3858-XXX**

Application tools: 3M™ Press 3640 (or equivalent), 3M™ Locator Plate 3443-113, 3M™ Platen 3442-45.

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