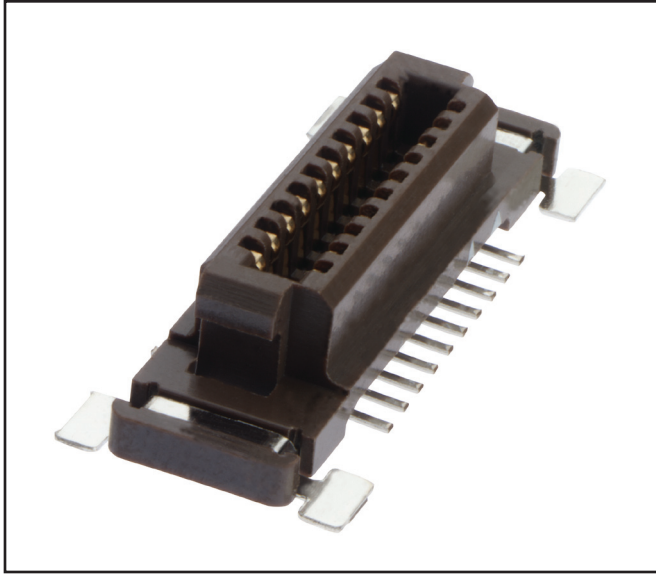


# 3M™ Pak 50 Socket

.050" Surfacemount Socket .276" and .315" Mating Heights

P50L Series



- Low profile 0.276" - 0.315" (7-8 mm) addresses surfacemount board stacking applications
- High temperature insulator compatible with IR and wave soldering
- Solder brackets increase connector stability to protect contact solder joint integrity
- Polarized alignment posts ensure correct mating
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS Compliance" section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 and C1 apply)

Date Modified: February 17, 2010

TS-2055-B  
Sheet 1 of 2

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## Physical

### Insulator:

Material: Glass Filled PPS

Flammability: UL 94V-0

Color: Brown

Contact Material: Phosphor Bronze

### Plating:

Underplating: Nickel

Wiping Area: Gold Flash

Solder Tails: Gold Flash

Retaining Clips: Tin-Copper

Mating Compatibility: TS-2056

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## Electrical

**Current Rating:** 0.5 A

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

**Withstanding Voltage:** 650 V<sub>AC</sub> for 1 minute

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## Environmental

**Temperature Rating:** -55°C to +85°C

**Process Rating:** 260°C MSL1 (per J-STD-020C)

UL File No.: E68080

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Interconnect Solutions  
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# 3M™ Pak 50 Socket

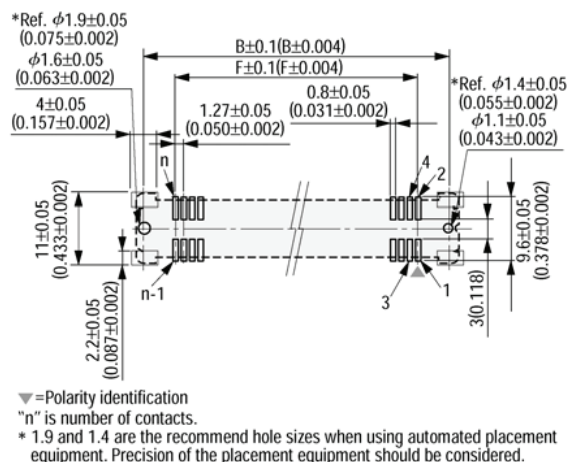
.050" Surfacemount Socket .276" and .315" Mating Heights

P50L Series

**Product Table / Dimensions**

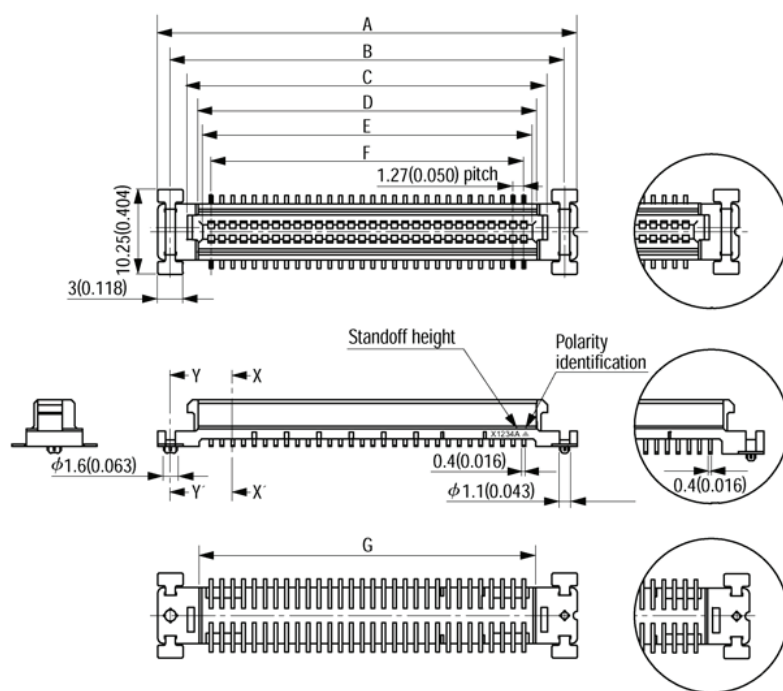
| Contact Quantity | A                | B                | C                | D                | E                | F                | G                |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 20               | 24.03<br>[0.946] | 21.03<br>[0.828] | 17.03<br>[0.670] | 14.23<br>[0.560] | 13.43<br>[0.529] | 11.43<br>[0.450] | 14.23<br>[0.560] |
| 30               | 30.38<br>[1.196] | 27.38<br>[1.078] | 23.38<br>[0.920] | 20.58<br>[0.810] | 19.78<br>[0.779] | 17.78<br>[0.700] | 20.58<br>[0.810] |
| 40               | 36.73<br>[1.446] | 33.73<br>[1.328] | 29.73<br>[1.170] | 26.93<br>[1.060] | 26.13<br>[1.029] | 24.13<br>[0.950] | 26.93<br>[1.060] |
| 50               | 43.08<br>[1.696] | 40.08<br>[1.578] | 36.08<br>[1.420] | 33.28<br>[1.310] | 32.48<br>[1.279] | 30.48<br>[1.200] | 33.28<br>[1.310] |
| 60               | 49.43<br>[1.946] | 46.43<br>[1.828] | 42.43<br>[1.670] | 39.63<br>[1.560] | 38.83<br>[1.529] | 36.83<br>[1.450] | 39.63<br>[1.560] |
| 80               | 62.13<br>[2.446] | 59.13<br>[2.328] | 55.13<br>[2.170] | 52.33<br>[2.060] | 51.53<br>[2.029] | 49.53<br>[1.950] | 52.33<br>[2.060] |
| 100              | 74.83<br>[2.946] | 71.83<br>[2.828] | 67.83<br>[2.670] | 65.03<br>[2.560] | 64.23<br>[2.529] | 62.23<br>[2.450] | 65.03<br>[2.560] |
| 120              | 87.53<br>[3.446] | 84.53<br>[3.328] | 80.53<br>[3.170] | 77.73<br>[3.060] | 76.93<br>[3.029] | 74.93<br>[2.950] | 77.73<br>[3.060] |

**Printed Circuit Board Layout  
(Component Side View)**

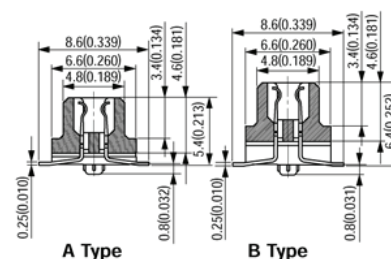


**A Type (Standoff height)**

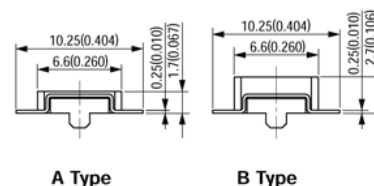
**B Type**



**X-X' Cross Section**



**Y-Y' Cross Section**



## Ordering Information

**P50L - XXXS - XX - DA** (RIA E1 and C1 apply)

Contact Quantity:  
See Table

AS = SMT, Type A  
BS = SMT, Type B

TS-2055-B  
Sheet 2 of 2

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#### **3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnector.com](http://www.3Mconnector.com)

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RIA-2217B-E

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