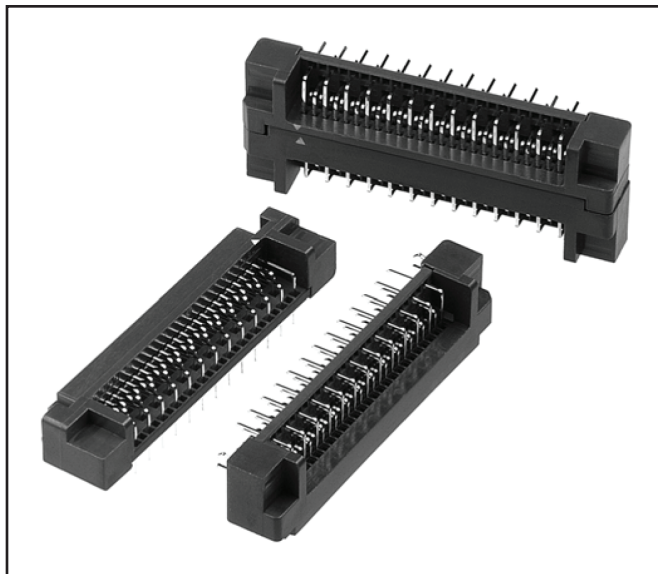


# 3M™ Pak 50 Low Profile Plug

.050" Low Profile, Through-Hole, Right Angle, Boardmount

P50L Series



- Low profile 0.276" (7 mm) from PCB surface
- High temperature insulator compatible with IR and wave soldering
- Optional plug standoffs allow offset of mated board by 1.0 - 4.0 mm
- Retention clips stabilize connector to the board during wave soldering
- 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 10, 2010

TS-1161-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-1146 , TS-2054

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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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# 3M™ Pak 50 Low Profile Plug

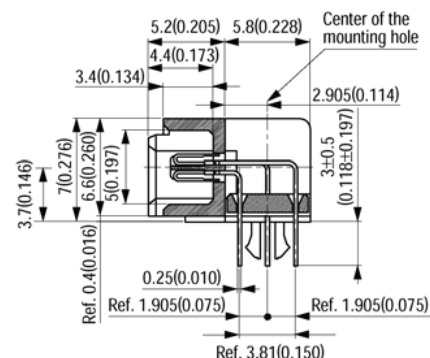
.050" Low Profile, Through-Hole, Right Angle, Boardmount

P50L Series

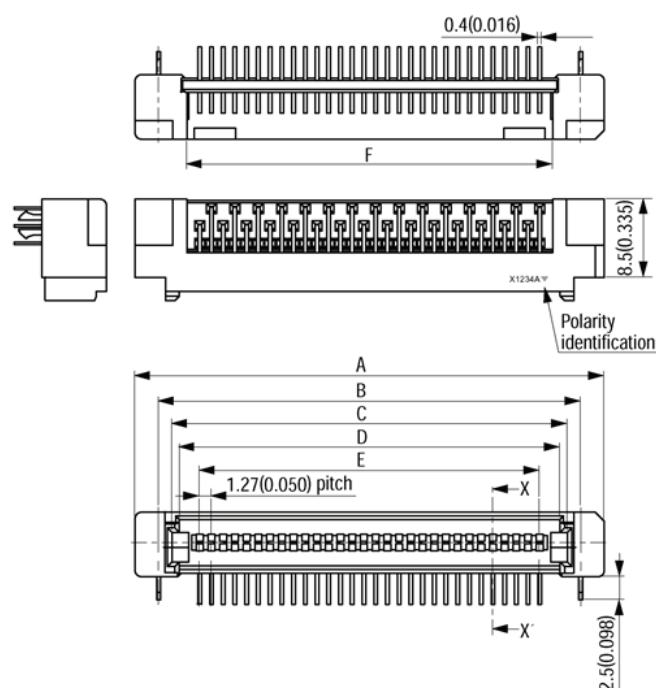
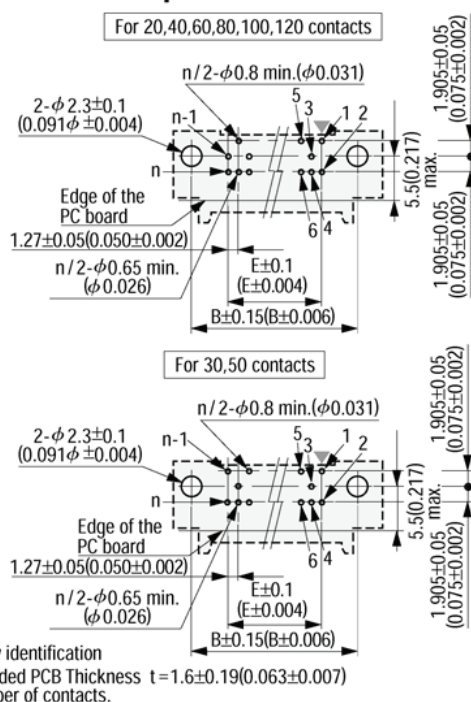
**Product Table / Dimensions for Straight with Flanges, with or without Retention Clips**

Contact Quantity	A	B	C	D	E	F	G
20	25.43 [1.001]	20.32 [0.800]	17.43 [0.686]	15.83 [0.623]	11.43 [0.450]	14.23 [0.560]	14.23 [0.560]
30	31.78 [1.251]	26.67 [1.050]	23.78 [0.936]	22.18 [0.873]	17.78 [0.700]	20.58 [0.810]	20.58 [0.810]
40	38.13 [1.501]	33.02 [1.300]	30.13 [1.186]	28.53 [1.123]	24.13 [0.950]	26.93 [1.060]	26.93 [1.060]
50	44.48 [1.751]	39.37 [1.550]	36.48 [1.436]	34.88 [1.373]	30.48 [1.200]	33.28 [1.310]	33.28 [1.310]
60	50.83 [2.001]	45.72 [1.800]	42.83 [1.686]	41.23 [1.623]	36.83 [1.450]	39.63 [1.560]	39.63 [1.560]
80	63.53 [2.501]	58.42 [2.300]	55.53 [2.186]	53.93 [2.123]	49.53 [1.950]	52.33 [2.060]	52.33 [2.060]
100	76.23 [3.001]	71.12 [2.800]	68.23 [2.686]	66.63 [2.623]	62.23 [2.450]	65.03 [2.560]	65.03 [2.560]
120	88.93 [3.501]	83.82 [3.300]	80.93 [3.186]	79.33 [3.123]	74.93 [2.950]	77.73 [3.060]	77.73 [3.060]

**X-X' Cross Section**



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



## Ordering Information

**P50L - XXXP - RR1 - DA** (RIA E1 and C1 apply)

Contact Quantity:  
See Table

TS-1161-B  
Sheet 2 of 2



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