

3M™ Pak 50 Low Profile Plug

.050" Plug, (1.27) Straight, Right Angle and SMT, Low Profile

P50LE Series



- Latch/eject mechanism maintains a secure connection
- Low profile 11.8 mm mated height when using the surfacemount version
- Mates to the P25LE wiremount socket
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS Compliance" section of www.3Mconnector.com for compliance information (RIA E1 and C1 apply)

Date Modified: February 11, 2010

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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-1142

Electrical

Current Rating: 0.5 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at 250 V_{DC}

Withstanding Voltage: 300 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

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

UL File No.: E68080

3M
Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

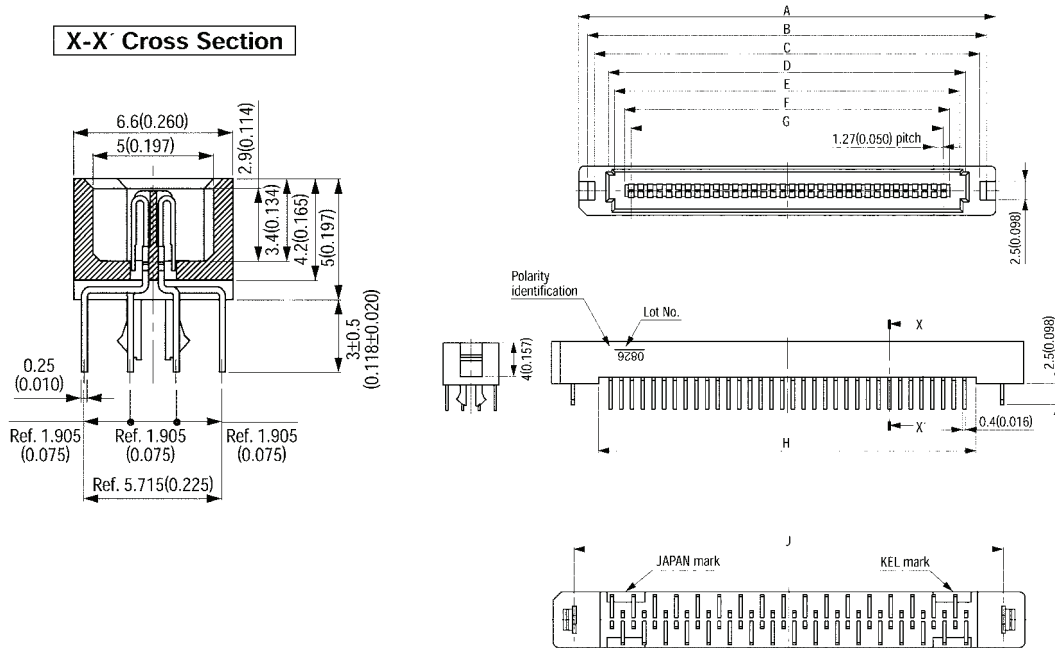
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For technical, sales or ordering information call
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3M™ Pak 50 Low Profile Plug

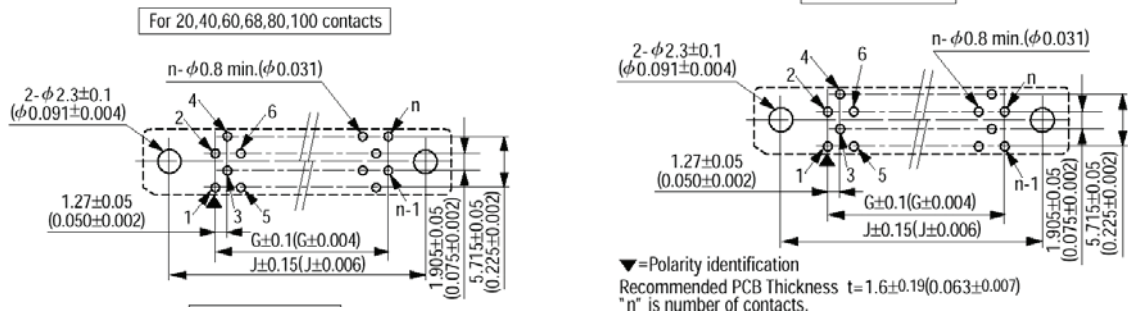
.050" Plug, (1.27) Straight, Right Angle and SMT, Low Profile

P50LE Series

Straight Plug (Through Hole Solder Tails)



Printed Circuit Board Layout (Component Side View)



Ordering Information

P50LE - XXXP1 - XXX - DA (RIA E1 and C1 apply)

Contact Quantity: _____
See Table

Solder Tail Options:
R1 = Straight/ .118" (3.0) Through hole
RR1 = Right Angle/ .118" (3.0) Through hole
SML = Vertical Surface Mounts

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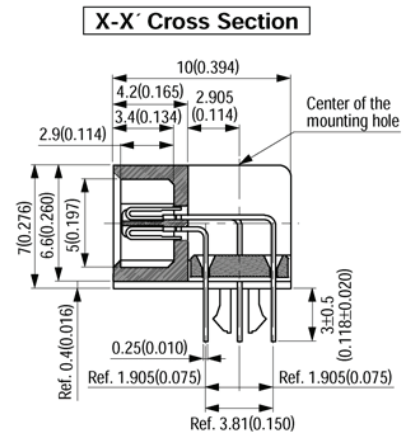
3M™ Pak 50 Low Profile Plug

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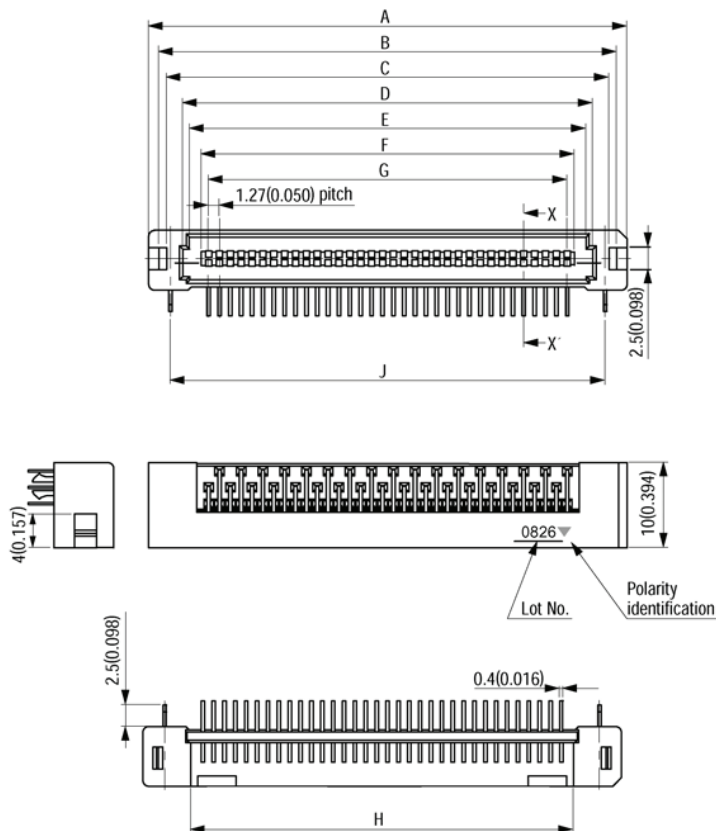
P50LE Series

Product Table / Dimensions for Straight and Right Angle Thru-hole Plug

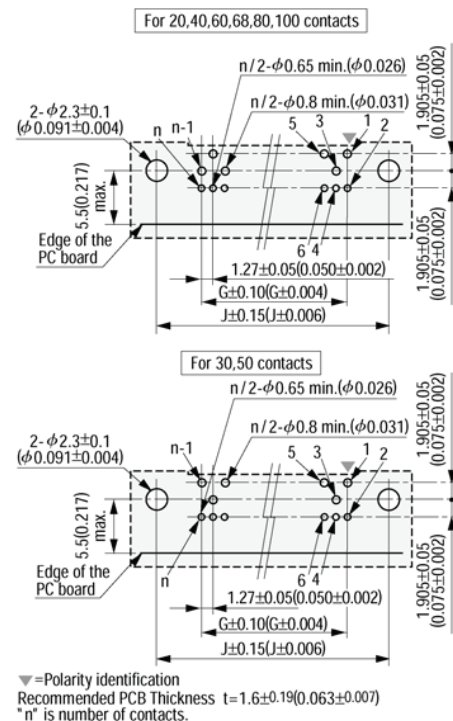
| Contact Quantity | A | B | C | D | E | F | G | H | J |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 20 | 25.43 [1.001] | 23.03 [0.906] | 21.23 [0.836] | 17.43 [0.686] | 15.83 [0.623] | 13.13 [0.517] | 11.43 [0.450] | 14.23 [0.560] | 20.32 [0.800] |
| 30 | 31.78 [1.251] | 29.38 [1.157] | 27.58 [1.086] | 23.78 [0.936] | 22.18 [0.873] | 19.48 [0.767] | 17.78 [0.700] | 20.58 [0.810] | 26.67 [1.050] |
| 40 | 38.13 [1.501] | 35.73 [1.407] | 33.93 [1.336] | 30.13 [1.186] | 28.53 [1.123] | 25.83 [1.017] | 24.13 [0.950] | 26.93 [1.060] | 33.02 [1.300] |
| 50 | 44.48 [1.751] | 42.08 [1.657] | 40.28 [1.586] | 36.48 [1.436] | 34.88 [1.373] | 32.18 [1.267] | 30.48 [1.200] | 33.28 [1.310] | 39.37 [1.550] |
| 60 | 50.83 [2.001] | 48.43 [1.907] | 46.63 [1.836] | 42.83 [1.686] | 41.23 [1.623] | 38.53 [1.517] | 36.83 [1.450] | 39.63 [1.560] | 45.72 [1.800] |
| 68 | 55.91 [2.201] | 53.51 [2.107] | 51.71 [2.036] | 47.91 [1.886] | 46.31 [1.823] | 43.61 [1.717] | 41.91 [1.650] | 44.71 [1.760] | 50.80 [2.000] |
| 80 | 63.53 [2.501] | 61.13 [2.407] | 59.33 [2.336] | 55.53 [2.186] | 53.93 [2.123] | 51.23 [2.017] | 49.53 [1.950] | 52.33 [2.060] | 58.42 [2.300] |
| 100 | 76.23 [3.001] | 73.83 [2.907] | 72.03 [2.836] | 68.23 [2.686] | 66.63 [2.623] | 63.93 [2.517] | 62.23 [2.450] | 65.03 [2.560] | 71.12 [2.800] |



Right Angle Plug (Through Hole Solder Tails)



Printed Circuit Board Layout (Component Side View)



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3M™ Pak 50 Low Profile Plug

.050" Plug, (1.27) Straight, Right Angle and SMT, Low Profile

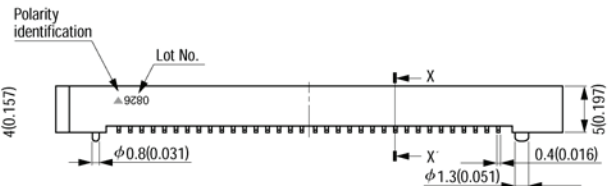
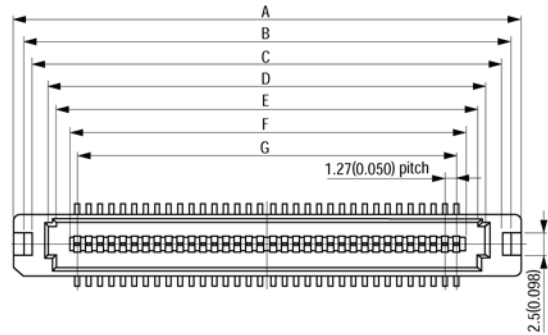
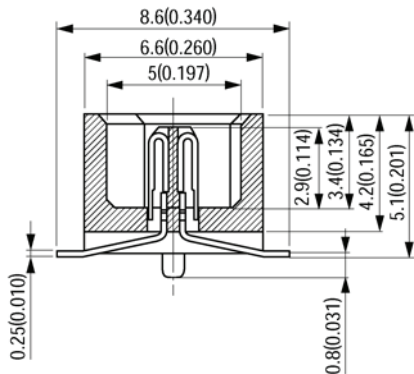
P50LE Series

Product Table / Dimensions for SMT Plug

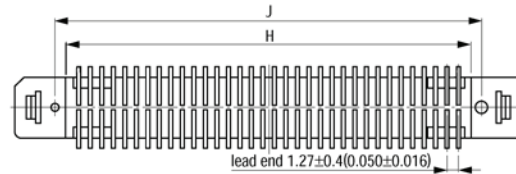
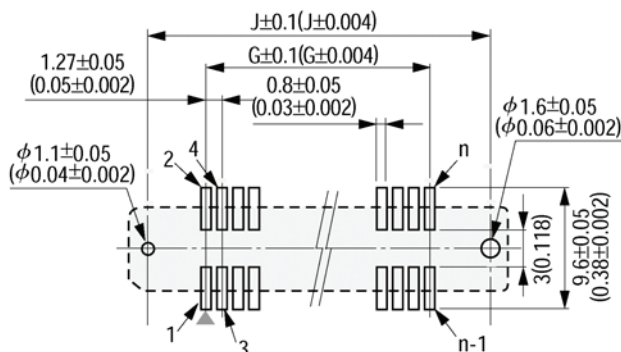
| Contact Quantity | A | B | C | D | E | F | G | H | J |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 20 | 25.43 [1.001] | 23.03 [0.907] | 21.23 [0.836] | 17.43 [0.686] | 15.83 [0.623] | 13.13 [0.517] | 11.43 [0.450] | 14.23 [0.560] | 16.51 [0.650] |
| 30 | 31.78 [1.251] | 29.38 [1.157] | 27.58 [1.086] | 23.78 [0.936] | 22.18 [0.873] | 19.48 [0.767] | 17.78 [0.700] | 20.58 [0.810] | 22.86 [0.900] |
| 40 | 38.13 [1.501] | 35.73 [1.407] | 33.93 [1.336] | 30.13 [1.186] | 28.53 [1.123] | 25.83 [1.017] | 24.13 [0.950] | 26.93 [1.060] | 29.21 [1.150] |
| 50 | 44.48 [1.751] | 42.08 [1.657] | 40.28 [1.586] | 36.48 [1.436] | 34.88 [1.373] | 32.18 [1.267] | 30.48 [1.200] | 33.28 [1.310] | 35.56 [1.400] |
| 60 | 50.83 [2.001] | 48.43 [1.907] | 46.63 [1.836] | 42.83 [1.686] | 41.23 [1.623] | 38.53 [1.517] | 36.83 [1.450] | 39.63 [1.560] | 41.91 [1.650] |
| 68 | 55.91 [2.201] | 53.51 [2.107] | 51.71 [2.036] | 47.91 [1.886] | 46.31 [1.823] | 43.61 [1.717] | 41.91 [1.650] | 44.71 [1.760] | 46.99 [1.850] |
| 80 | 63.53 [2.501] | 61.13 [2.407] | 59.33 [2.336] | 55.53 [2.186] | 53.93 [2.123] | 51.23 [2.017] | 49.53 [1.950] | 52.33 [2.060] | 54.61 [2.150] |
| 100 | 76.23 [3.001] | 73.83 [2.907] | 72.03 [2.836] | 68.23 [2.686] | 66.63 [2.623] | 63.93 [2.517] | 62.23 [2.450] | 65.03 [2.560] | 67.31 [2.650] |

Straight Plug (SMT)

X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



▼=Polarity identification
"n" is number of contacts.

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