

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: July 13, 2011

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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



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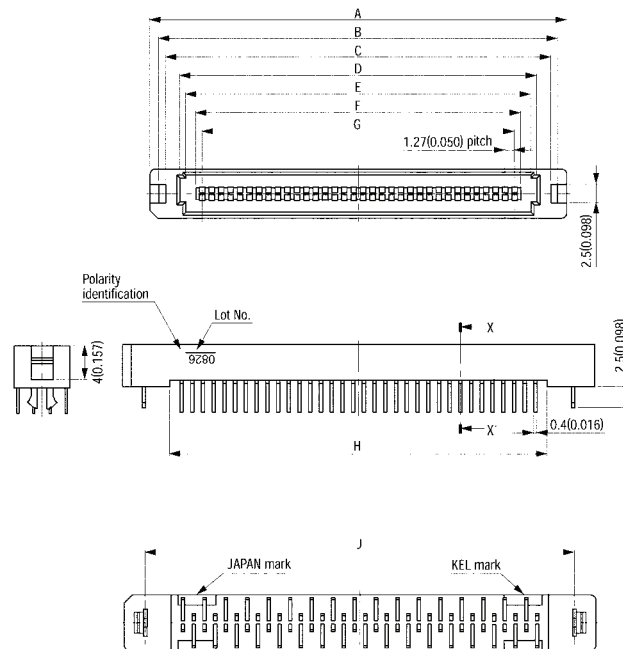
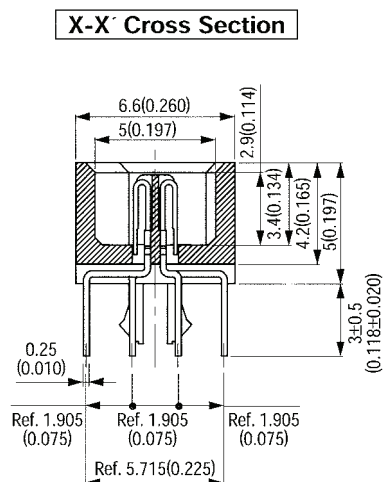
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3M™ Pak 50 Low Profile Plug

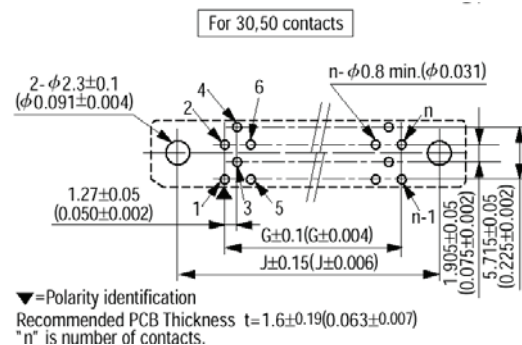
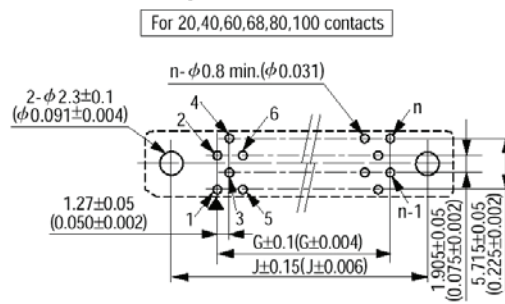
.050" Plug, (1.27) Straight, Right Angle and SMT, Low Profile

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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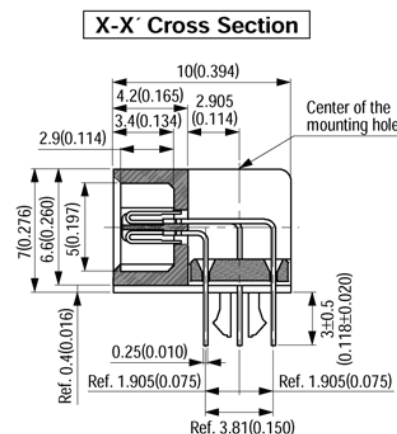
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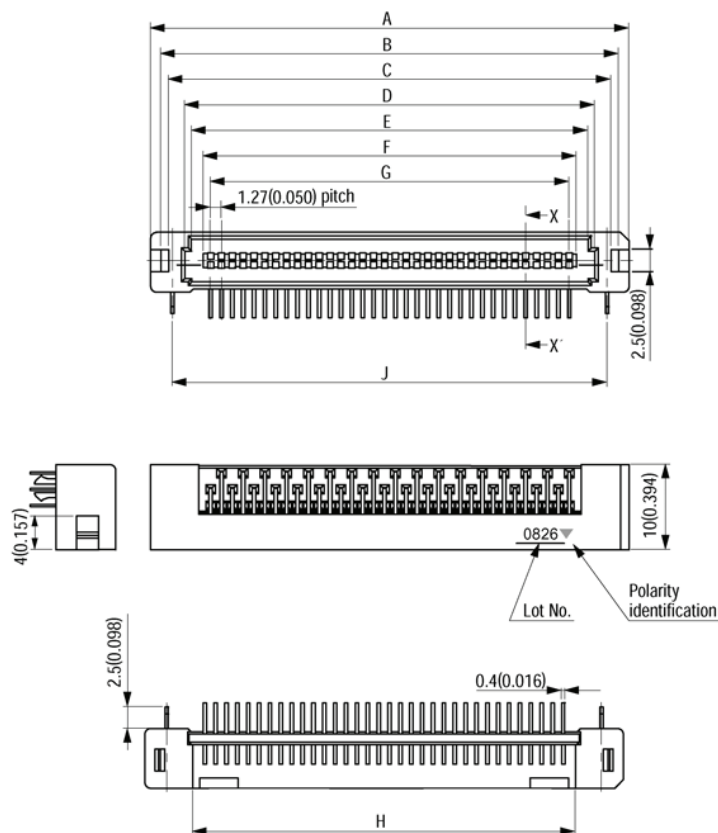
P50LE Series

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]

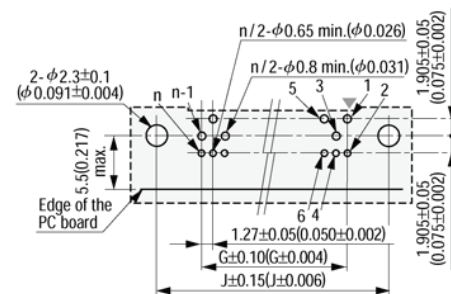


Right Angle Plug (Through Hole Solder Tails)

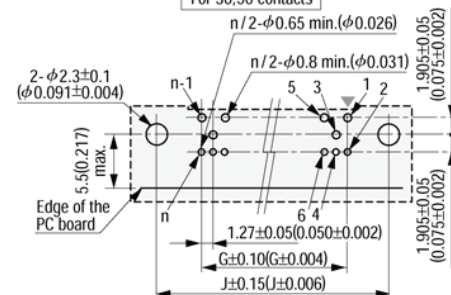


Printed Circuit Board Layout (Component Side View)

For 20,40,60,68,80,100 contacts



For 30,50 contacts



▼=Polarity identification
Recommended PCB Thickness $t=1.6\pm0.19(0.063\pm0.007)$
"n" is number of contacts.

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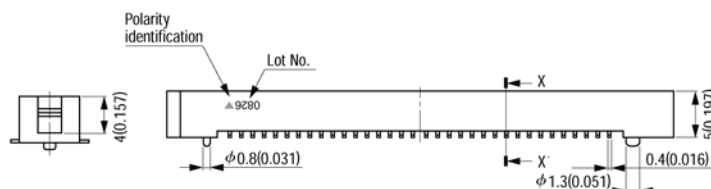
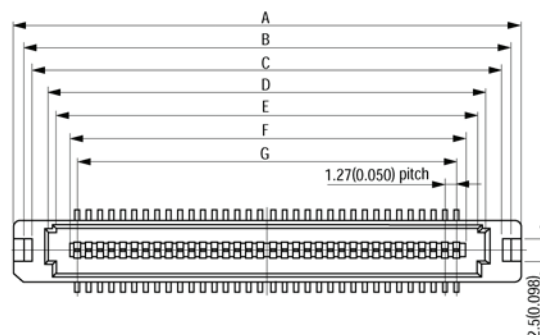
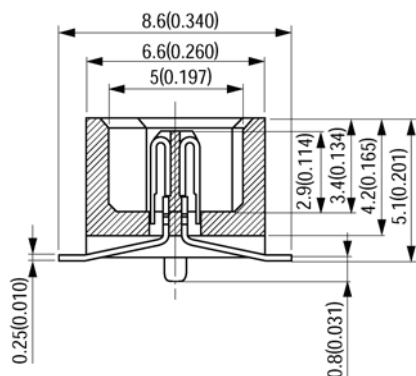
P50LE Series

Product Table / Dimensions for SMT Plug

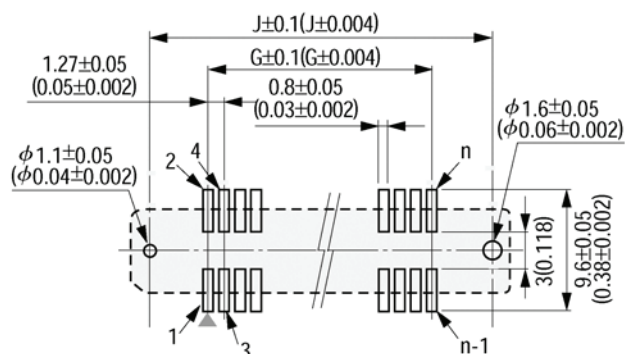
Contact Quantity	A	B	C	D	E	F	G	H	J
20	25.43 [1.001]	23.03 [0.907]	21.23 [0.836]	17.43 [0.686]	15.83 [0.623]	13.13 [0.517]	11.43 [0.450]	14.23 [0.560]	16.51 [0.650]
30	31.78 [1.251]	29.38 [1.157]	27.58 [1.086]	23.78 [0.936]	22.18 [0.873]	19.48 [0.767]	17.78 [0.700]	20.58 [0.810]	22.86 [0.900]
40	38.13 [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)

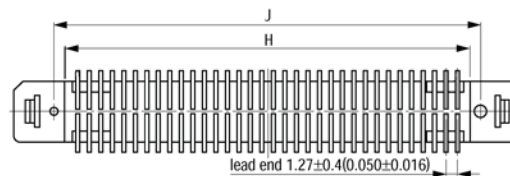
X-X' Cross Section



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



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



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3M Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnector.com

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