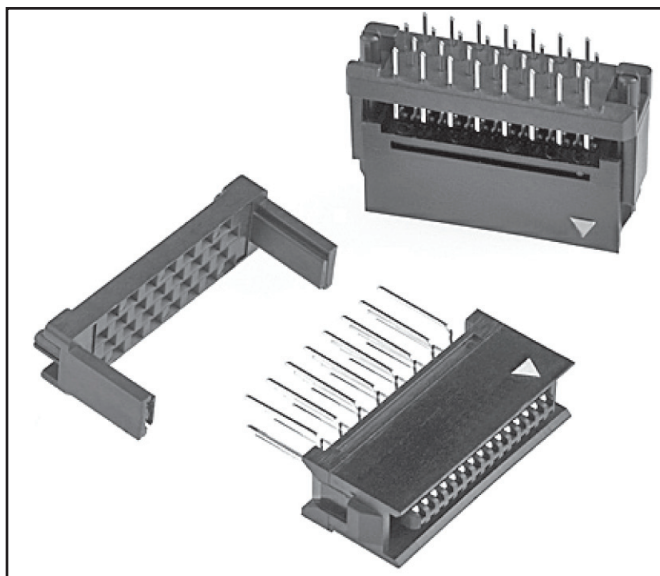


# 3M™ Pak 50 Boardmount Plug

.050" Through-Hole, Vertical Stacking

P50 Series



- Stacking connector available in 20, 24 and 30 mm stacking heights
- Custom stack heights between 18 and 30 mm available
- Mates with 3M™ P50 Series Straight and Right Angle socket connectors
- Two mating points per contact
- Alignment posts facilitate easy 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 18, 2010

TS-2048-C  
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## Physical

### Insulator:

Material: Glass Filled Nylon

Flammability: UL 94V-0

Color: Black

Contact Material: Phosphor Bronze

### Plating:

Underplating: Nickel

Wiping Area: 10  $\mu$ " Gold

Solder Tails: Gold Flash

Mating Compatibility: TS-2047

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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 Wave Solder Compatible

UL File No.: E68080



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**800-225-5373**

# 3M™ Pak 50 Boardmount Plug

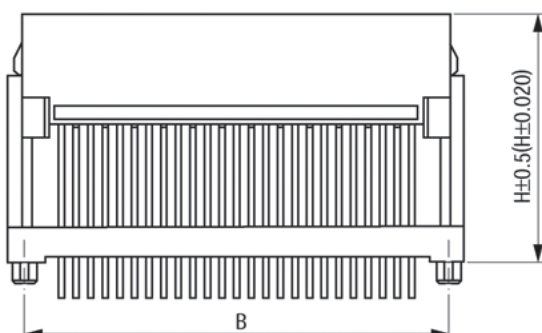
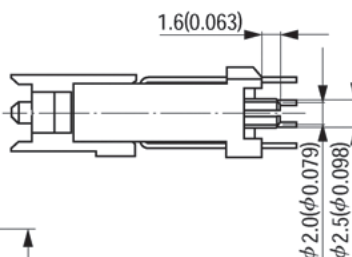
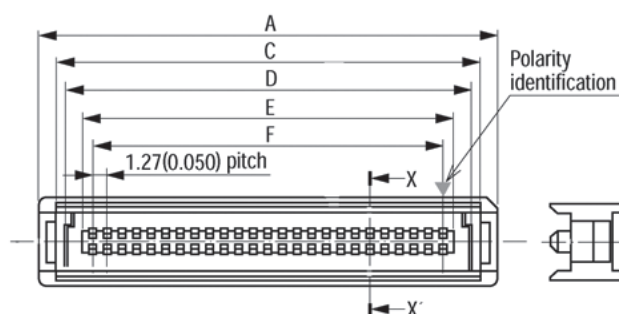
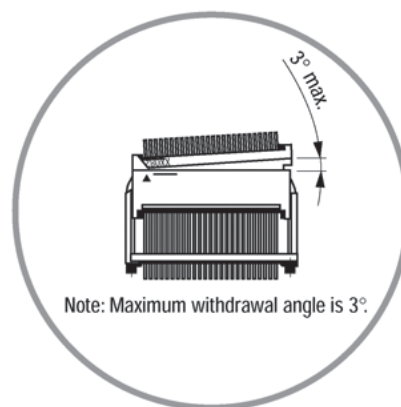
.050" Through-Hole, Vertical Stacking

P50 Series

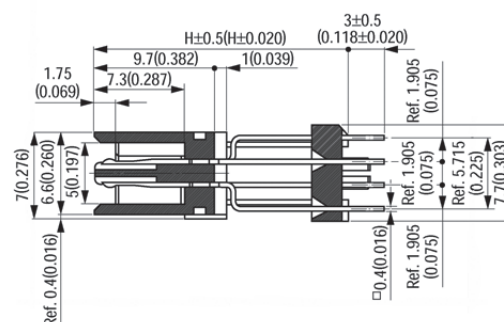
**Product Table / Dimensions**

Contact Quantity	A	B	C	D	E	F
20	20.63 [0.812]	17.78 [0.700]	17.83 [0.702]	15.83 [0.623]	13.13 [0.517]	11.43 [0.450]
30	26.98 [1.062]	24.13 [0.950]	24.18 [0.952]	22.18 [0.873]	19.48 [0.767]	17.78 [0.700]
40	33.33 [1.312]	30.48 [1.200]	30.53 [1.202]	28.53 [1.123]	25.83 [1.017]	24.13 [0.950]
50	39.68 [1.562]	36.83 [1.450]	36.88 [1.452]	34.88 [1.373]	32.18 [1.267]	30.48 [1.200]
60	46.03 [1.812]	43.18 [1.700]	43.23 [1.702]	41.23 [1.623]	38.53 [1.517]	36.83 [1.450]
80	58.73 [2.312]	55.88 [2.200]	55.93 [2.202]	53.93 [2.123]	51.23 [2.017]	49.53 [1.950]
100	71.43 [2.812]	68.58 [2.700]	68.63 [2.702]	66.63 [2.623]	63.93 [2.517]	62.23 [2.450]

Part#	Stack Height	H
P50-XXXP-S20-EA	20 (0.787)	16.6 (0.654)
P50-XXXP-S24-EA	24 (0.945)	20.6 (0.811)
P50-XXXP-S30-EA	30 (1.181)	26.6 (1.047)



**X-X' Cross Section**



Note: Does not mate with P50E or the P25E

## Ordering Information

**P50L - XXXP - XXX - EA**

Contact Quantity:  
See Table

Stacking Heights:  
S20 = 20 mm [ 0.79" ]  
S24 = 24 mm [ 0.95" ]  
S30 = 30 mm [ 1.18" ]

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Sheet 2 of 3

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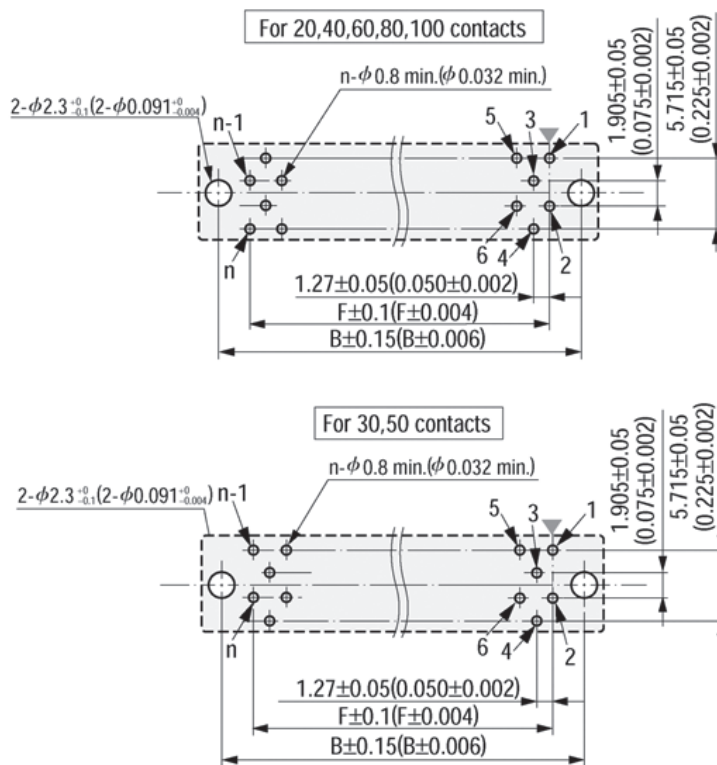
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# 3M™ Pak 50 Boardmount Plug

.050" Through-Hole, Vertical Stacking

P50 Series

## Printed Circuit Board Layout (Component Side View)



▼=Polarity identification

Recommended PCB Thickness  $t = 1.6 \pm 0.19$  ( $0.063 \pm 0.007$ )

"n" is number of contacts.

Note: Does not mate with P50E or the P25E

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Sheet 3 of 3



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<a href="#"><u>P50-030P-S24-EA</u></a>	<a href="#"><u>P50-030P-S30-EA</u></a>	<a href="#"><u>P50-040P-S20-EA</u></a>	<a href="#"><u>P50-040P-S24-EA</u></a>	<a href="#"><u>P50-040P-S30-EA</u></a>	<a href="#"><u>P50-050P-S20-EA</u></a>
<a href="#"><u>P50-050P-S24-EA</u></a>	<a href="#"><u>P50-050P-S30-EA</u></a>	<a href="#"><u>P50-060P-S20-EA</u></a>	<a href="#"><u>P50-060P-S24-EA</u></a>	<a href="#"><u>P50-060P-S30-EA</u></a>	<a href="#"><u>P50-080P-S20-EA</u></a>
<a href="#"><u>P50-080P-S24-EA</u></a>	<a href="#"><u>P50-080P-S30-EA</u></a>	<a href="#"><u>P50-100P-S20-EA</u></a>	<a href="#"><u>P50-100P-S24-EA</u></a>		