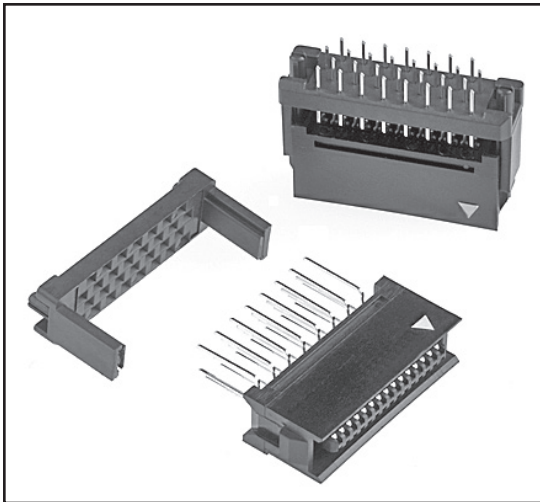


3M™ Pak 50 Boardmount Plug

.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.3M.com/Interconnects for compliance information (RIA E1 & C1 apply)

Date Modified: September 29, 2009

TS-2048-B
Sheet 1 of 3

Physical

Insulation:

Material: Glass Filled Nylon
Flammability: UL 94V-0
Color: Black

Contact:

Material: Phosphor Bronze

Plating:

Underplating: Nickel
Wiping Area: 10 μ" Gold
Solder Tails: Gold Flash

Mating Compatibility: P5X-XXXS-XXX-EA (TS-2047)

Electrical

Current Rating: 0.5 A

Insulation Resistance: $>1 \times 10^3 \Omega$ at 500 V_{DC}

Withstanding Voltage: 650 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Process Rating: 260°C Wave Solder Compatible

3M

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

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

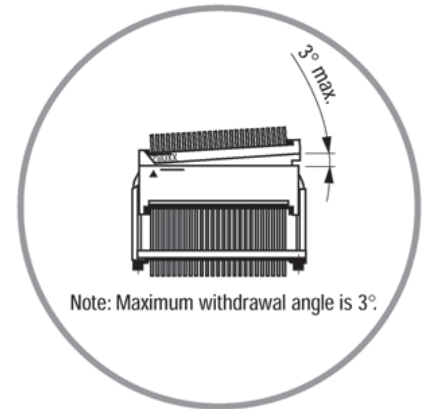
3M™ Pak 50 Boardmount Plug

.050" Through-Hole, Vertical Stacking

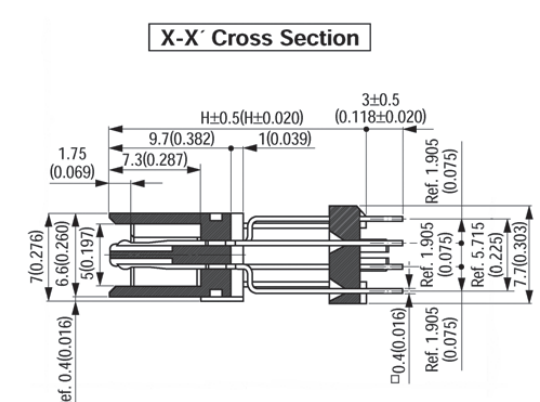
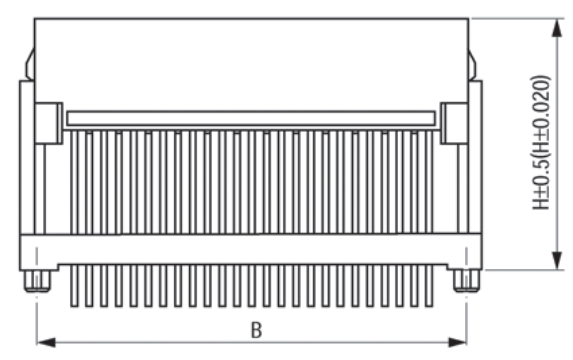
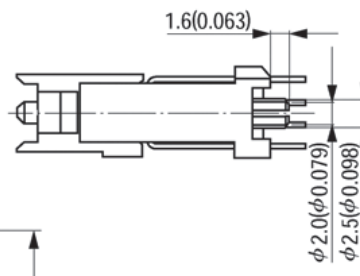
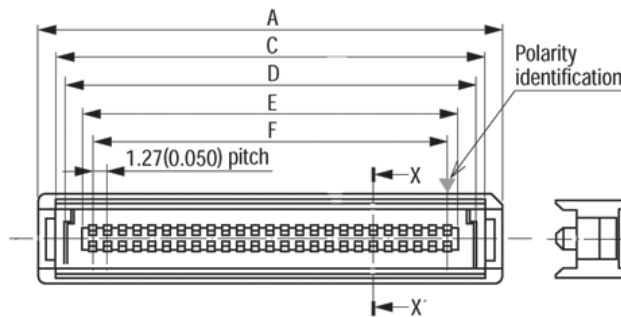
P50 Series

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-XXXX-S20-EA	20(0.787)	16.6 (0.654)
P50-XXXX-S24-EA	24(0.945)	20.6 (0.811)
P50-XXXX-S30-EA	30(1.181)	26.6 (1.047)



Note: Does not mate with P50E or the P25E

Ordering Information

P50 - XXXP - XXX - EA

Contact Quantity
See table

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

TS-2048-B
Sheet 2 of 3

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

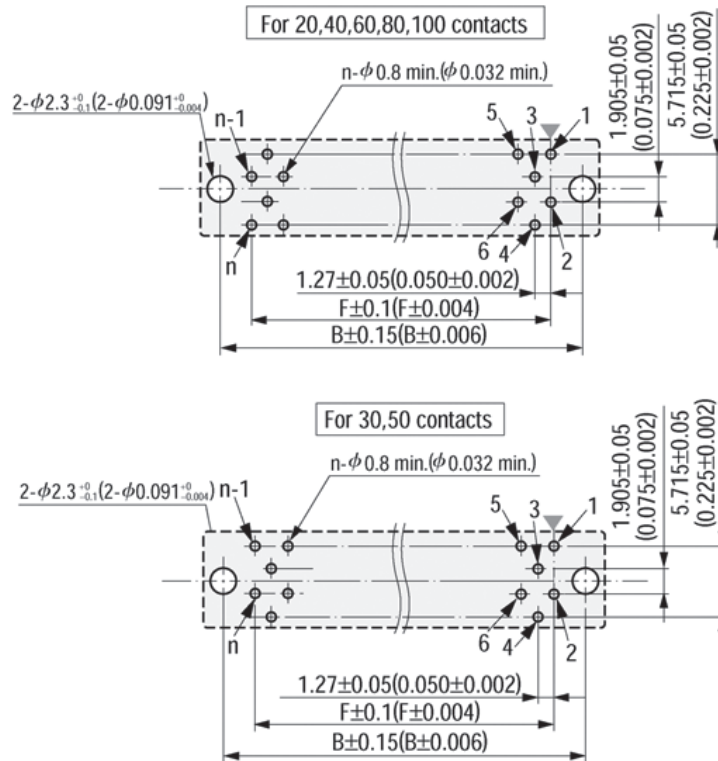
3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Pak 50 Boardmount Plug

.050" Through-Hole, Vertical Stacking

P50 Series

Printed Circuit Board Layout (Component Side View)



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

TS-2048-B
Sheet 3 of 3

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

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



3M Electronics Solutions Division

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

Please recycle. Printed in USA.
© 3M 2008. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.