

3M™ Pak 10 Socket

1 mm Straight and Right Angle, Surface Mount

PK10 Series



- 1 mm pitch connector system
- Stacked, Horizontal or Vertical Mating
- Low profile 5 mm mated height
- Surface mount retention clips reduce stress on surface mount leads
- Keyed design helps prevent mating misalignment
- Hard Tray and Vacuum pickup for automated assembly placement
- 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: December 11, 2017

TS-1077-F
Sheet 1 of 4

Physical

Insulation:

Material: Glass Filled LCP

Flammability: UL 94V-0

Color: White

Materials:

Contact: Copper Alloy

Retention Clips: Copper Alloy

Contact Plating:

Underplating: 120 μ” [3.0 μm] Nickel

Wiping Area: 2 μ” [0.05 μm] min. Gold

Solder Tails: Gold Flash

Retention Clip Plating: Gold Flash over 120 μ” [3.0 μm] Nickel

Marking: Orientation Triangle

Electrical

Current Rating: 0.5 A

Contact Resistance: 50 mΩ max

Insulation Resistance: 1 × 10³ MΩ min at 500 V_{DC}

Dielectric withstanding Voltage: 315 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Process Rating: 260°C per J-STD-020C

3M

Electronics Materials Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

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

3M™ Pak 10 Socket

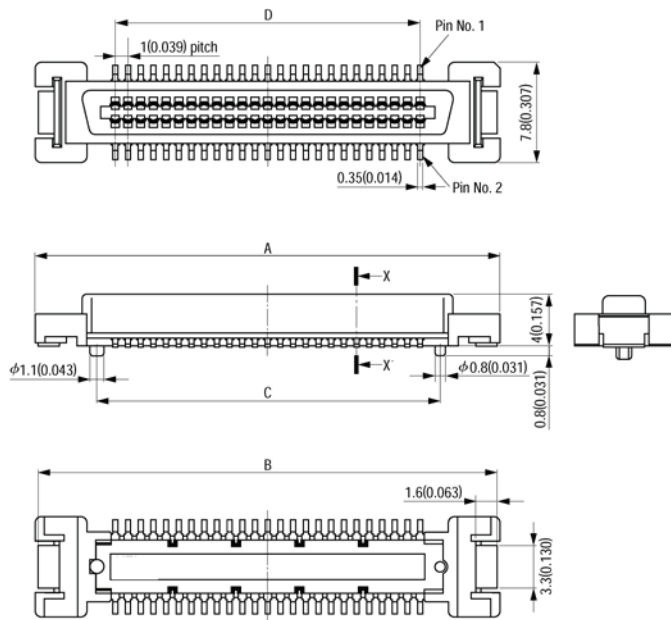
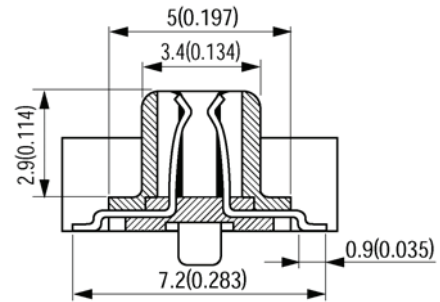
1 mm Straight and Right Angle, Surface Mount

PK10 Series

Straight Surface Mount

Contact Quantity	A	B	C	D
30	26.50 [1.043]	26.10 [1.028]	17.00 [0.669]	14.00 [0.551]
50	36.50 [1.437]	36.10 [1.421]	27.00 [1.063]	24.00 [0.945]
80	51.50 [2.028]	51.10 [2.012]	42.00 [1.654]	39.00 [1.535]
100	61.50 [2.421]	61.10 [2.406]	52.00 [2.047]	49.00 [1.929]

X-X' Cross Section

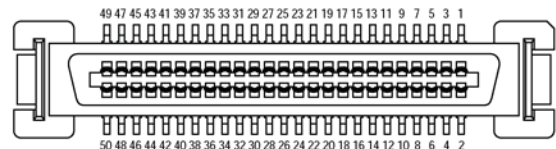
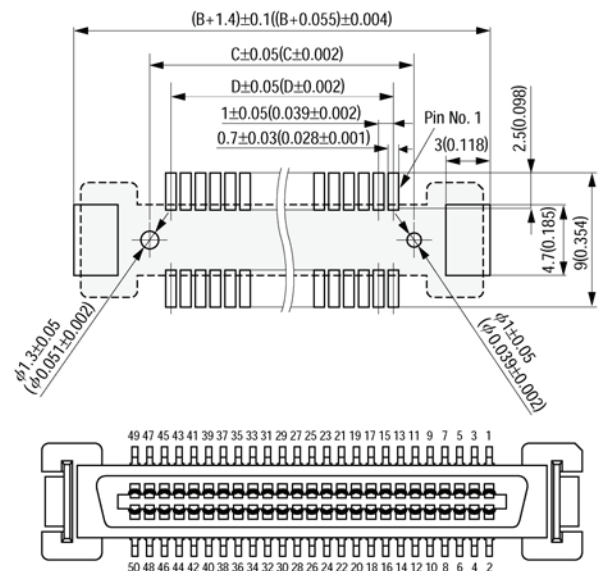


SMT lead thickness: T=0.2(0.008)
Metal retention pad thickness: T=0.3(0.012)

Automated Assembly:

- Packaged in Hard Trays
- Allows chucking type pick and place
- Molded vacuum suction cover is optional

Printed Circuit Board Layout (Component Side View)



Contact designation

mm
[inch]

Tolerance Unless Noted		
	.0	.00
mm	±.1	±.10

[] Dimensions for Reference Only

Ordering Information

PK10 - XXXSX - X - DA (RIA E1 & C1 apply)

Contact Quantity
See Table

Vacuum Suction Cover:

Blank = None

M = Molded Suction Cover

Note: M only available for Solder Tail Option S

Solder Tail Options:

S = Vertical

R = Right Angle

TS-1077-F
Sheet 2 of 4



Electronics Materials Solutions Division
Interconnect Solutions

<http://www.3Mconnector.com>

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

800-225-5373

3M™ Pak 10 Socket

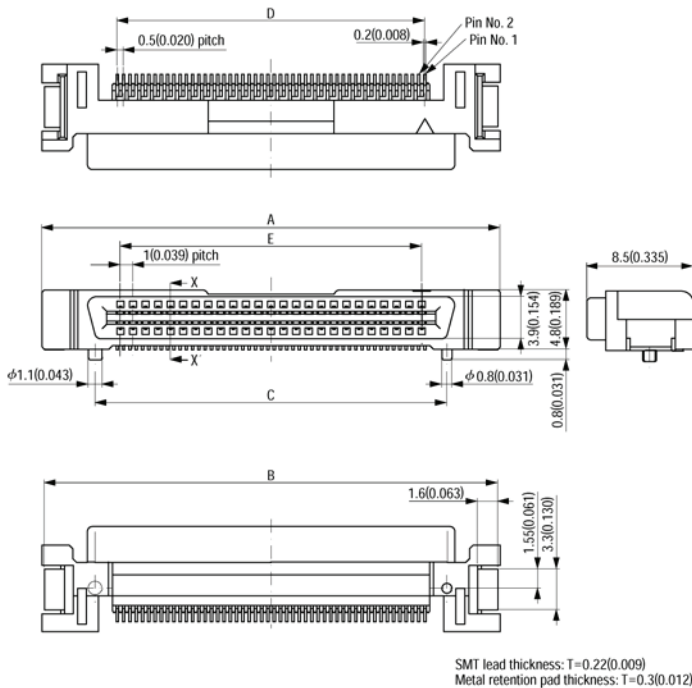
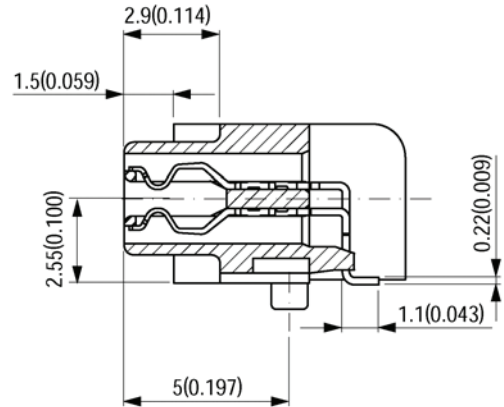
1 mm Straight and Right Angle, Surface Mount

PK10 Series

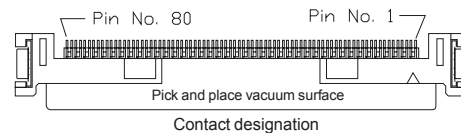
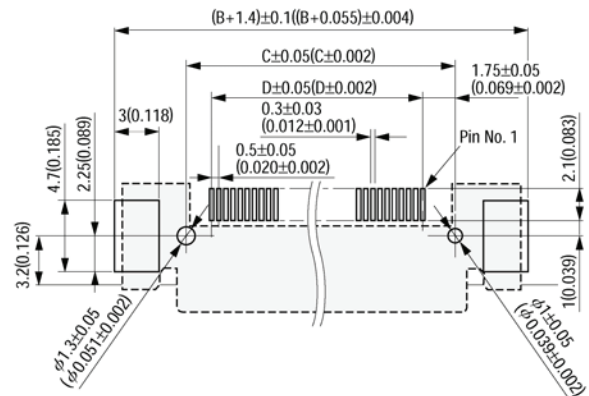
Right Angle Surface Mount mm [inch]

Contact Quantity	A	B	C	D	E
30	26.50	26.10	18.00	14.50	14.00
	[1.043]	[1.028]	[0.709]	[0.571]	[0.551]
50	36.50	36.10	28.00	24.50	24.00
	[1.437]	[1.421]	[1.102]	[0.965]	[0.945]
80	51.50	51.10	43.00	39.50	39.00
	[2.028]	[2.012]	[1.693]	[1.555]	[1.535]
100	61.50	61.10	53.00	49.50	49.00
	[2.421]	[2.406]	[2.087]	[1.949]	[1.929]
120	71.5	71.1	63.0	59.50	59.0
	[2.815]	[2.799]	[2.480]	[2.343]	[2.323]

X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



Automated Assembly:

- Packaged in Hard Trays
- Flat surface allows vacuum pick and place



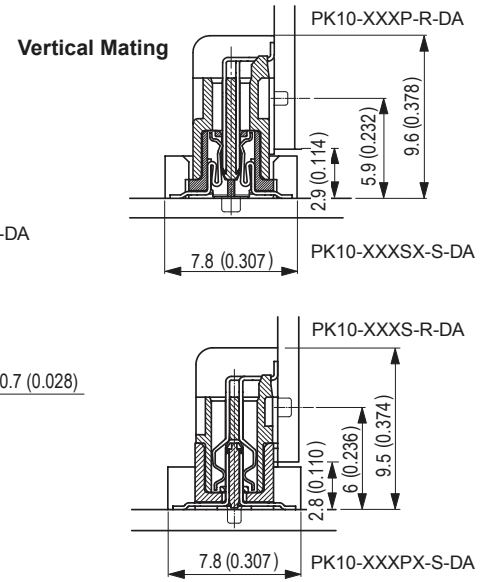
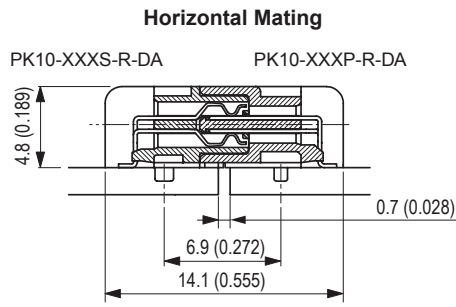
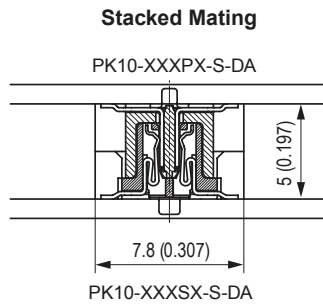
3M™ Pak 10 Socket

1 mm Straight and Right Angle, Surface Mount

PK10 Series

Unit: mm [inch]

Mating Variations



TS-1077-F
Sheet 4 of 4



Electronics Materials Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

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

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



3M Electronics Materials Solutions Division
6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnectors.com

3M is a trademark of 3M Company.
Please recycle. Printed in USA.
© 3M 2017. All rights reserved.
RIA-2217B-E