

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: August 27, 2010

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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



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

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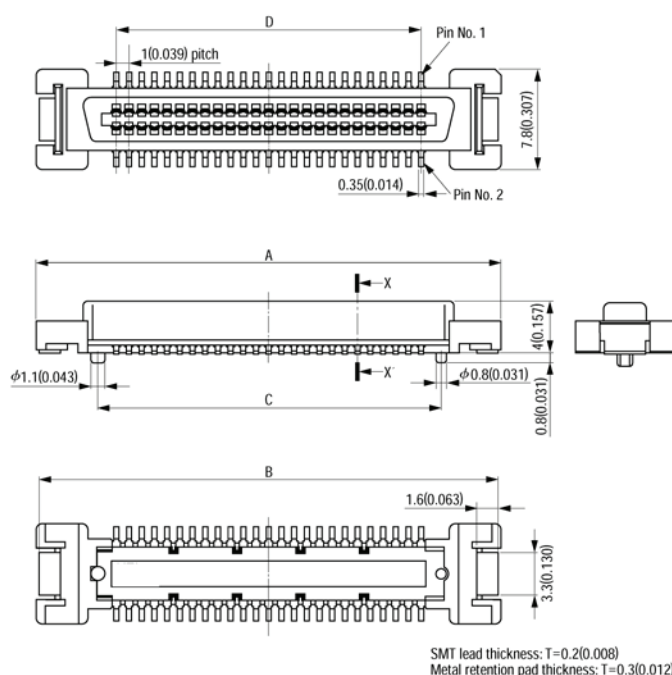
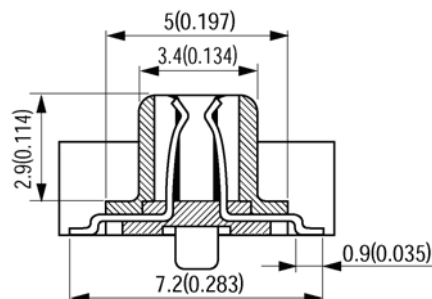
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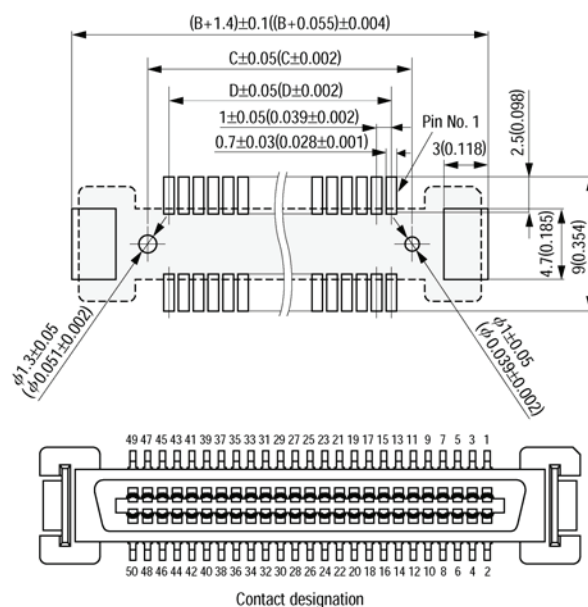
Straight Surface Mount

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

X-X' Cross Section



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



Automated Assembly:

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

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

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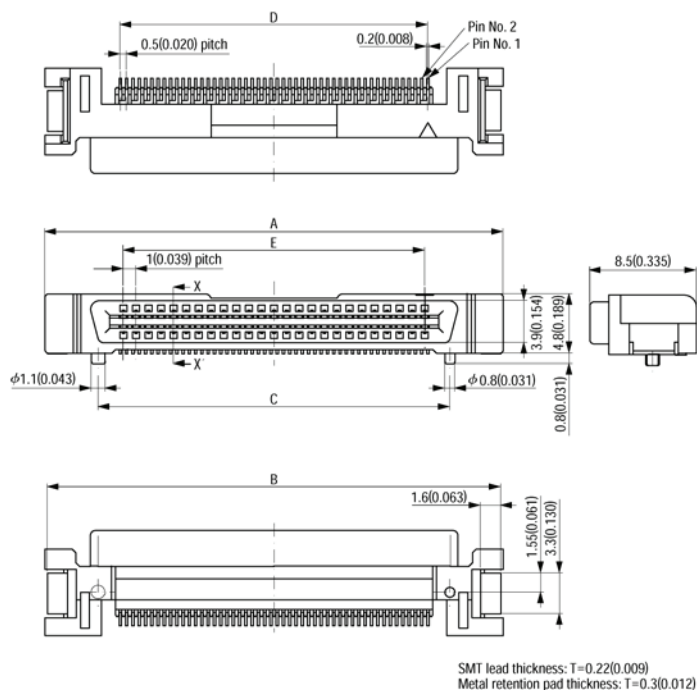
1 mm Straight and Right Angle, Surface Mount

Right Angle Surface Mount mm [inch]

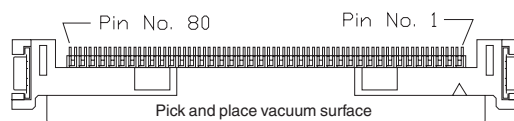
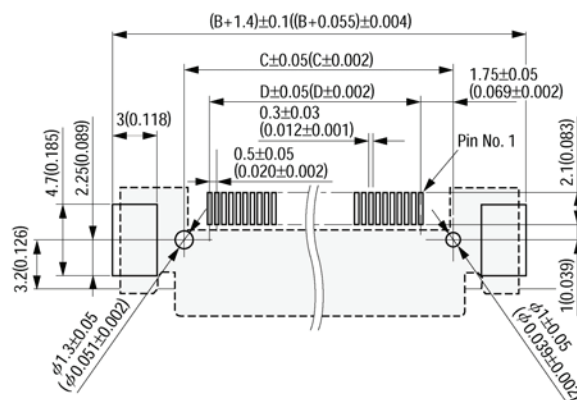
Contact Quantity	A	B	C	D	E
30	26.50	26.10	17.00	14.50	14.00
	[1.043]	[1.028]	[0.669]	[0.571]	[0.551]
50	36.50	36.10	27.00	24.50	24.00
	[1.437]	[1.421]	[1.063]	[0.965]	[0.945]
80	51.50	51.10	42.00	39.50	39.00
	[2.028]	[2.012]	[1.654]	[1.555]	[1.535]
100	61.50	61.10	52.00	49.50	49.00
	[2.421]	[2.406]	[2.047]	[1.949]	[1.929]
120	71.5	71.1	63.0	60.00	59.0
	[2.815]	[2.799]	[2.480]	[2.362]	[2.323]

Technical drawing of a cross-section of a mechanical component. The drawing shows a central shaft with a keyway, surrounded by a housing. The dimensions are as follows:

- Overall width: 2.9 (0.114)
- Distance from left edge to keyway: 1.5 (0.059)
- Distance from keyway to right edge: 1.1 (0.043)
- Overall height: 2.55 (0.100)
- Distance from top edge to keyway: 0.22 (0.009)
- Overall length: 5 (0.197)



Printed Circuit Board Layout (Component Side View)



Contact designation

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

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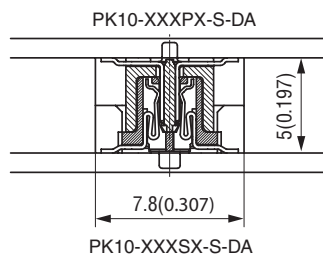
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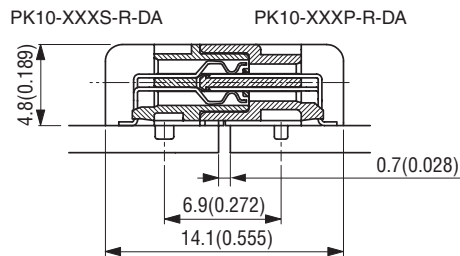
Mating Variations

Unit: mm [inch]

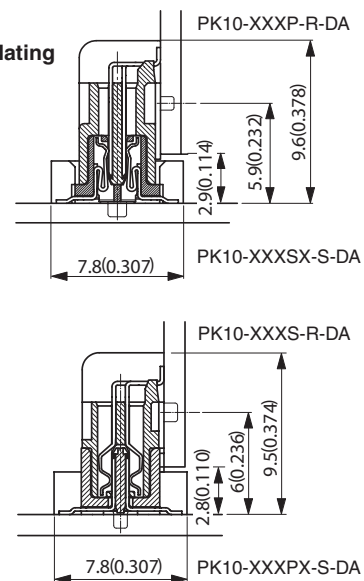
Stacked Mating



Horizontal Mating



Vertical Mating



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