

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 μ m] Nickel

Wiping Area: 2 μ " [0.05 μ m] min. Gold

Solder Tails: Gold Flash

Retention Clip Plating: Gold Flash over 120 μ " [3.0 μ m] Nickel

Marking: Orientation Triangle

Electrical

Current Rating: 0.5 A

Contact Resistance: 50 m Ω max

Insulation Resistance: 1×10^3 M Ω 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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Electronic Solutions Division
Interconnect Solutions
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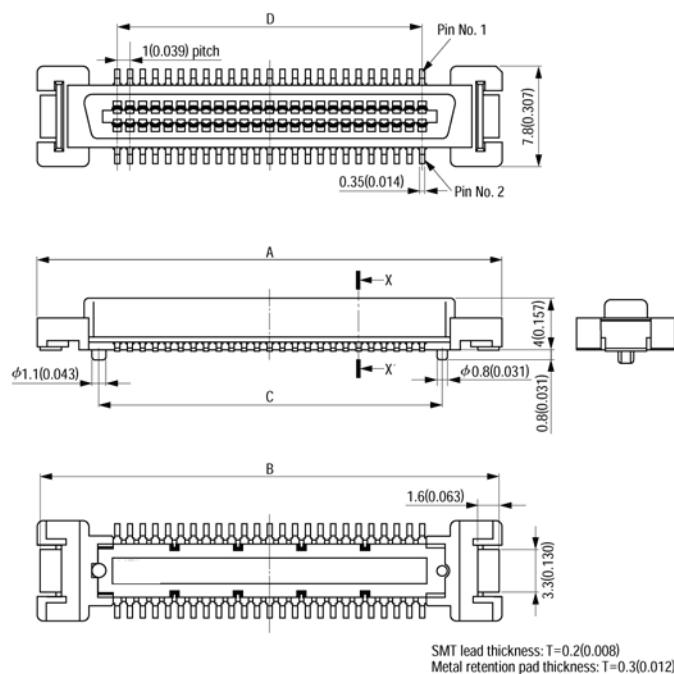
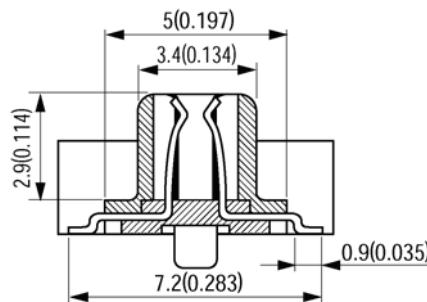
1 mm Straight and Right Angle, Surface Mount

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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

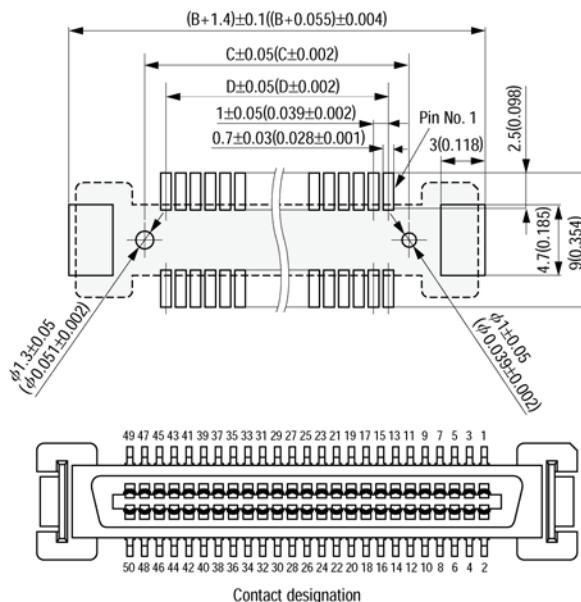


SMT lead thickness: T=0.2(0.008)
Metal retention pad thickness: T=0.3(0.012)

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

Ordering Information

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

Contact Quantity
See Table

Solder Tail Options:
S = Vertical
R = Right Angle

Vacuum Suction Cover:

Blank = None

M = Molded Suction Cover

Note: M only available for Solder Tail Option S

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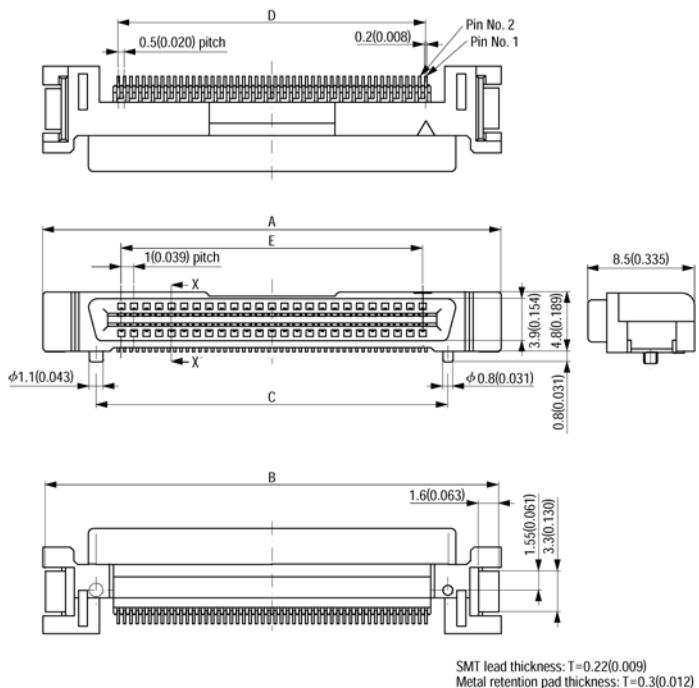
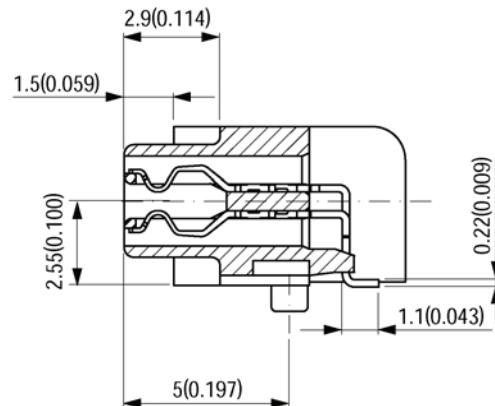
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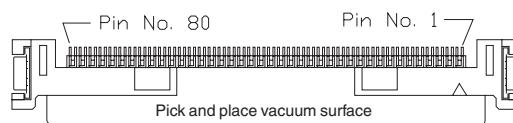
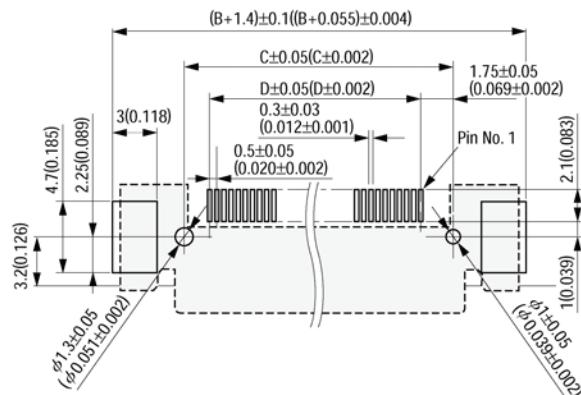
Right Angle Surface Mount mm [inch]

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

X-X' Cross Section



Printed Circuit Board Layout
(Component Side View)



Contact designation

Automated Assembly:

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

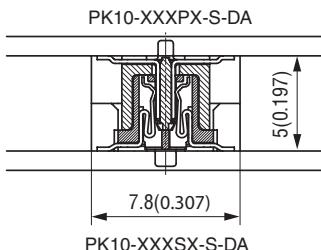
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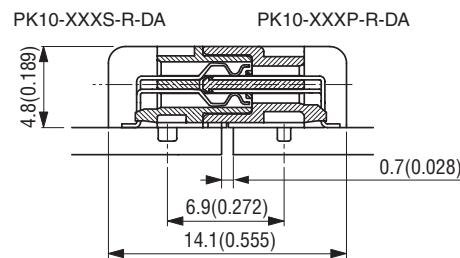
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Mating Variations

Stacked Mating

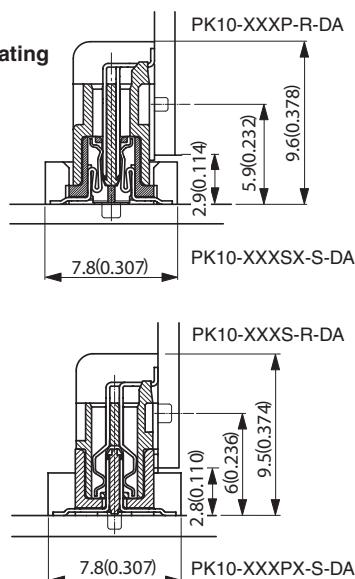


Horizontal Mating



Unit: mm [inch]

Vertical Mating



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