

3M™ Pak 10 Media Plug

1 mm Right Angle, Surfacemount, With Pwr. Gnd. Option

PK10M Series



- 1 mm pitch connector system
- Four mating heights available
- Available power contacts rated at 5A
- Available frame ground connection through surfacemount retention clips
- Keyed design helps prevent mating misalignment
- RoHS compliant* version (DA plating suffix) available

Date Modified: January 8, 2007

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Physical

Insulation

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

Contact

Signal Contact: Copper Alloy
Power Contact: Copper Alloy
Retention Clips: Copper Alloy

Contact Plating

Underplating: 120 μ " [3.0 μ m] Nickel
Wiping Area: 4 μ " [0.10 μ m] min. Gold
Solder Tails: Tin Alloy or Gold Flash (RoHS compliant)

Retention Clip Plating: Tin Copper over 120 μ " [3.0 μ m] Nickel

Marking: Orientation Triangle, Standoff Height Code, Lot Number

Electrical

Current Rating: 0.5 A per Signal Contact, 5 A Power Contact

Insulation Resistance: 1×10^3 M Ω min at 250 V_{DC}

Withstanding Voltage: 300 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

Process Rating: Maximum 260°C

"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

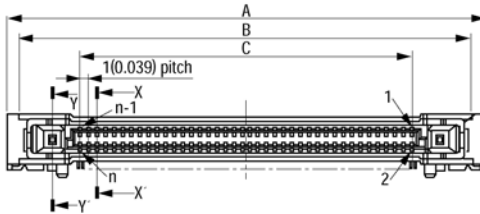
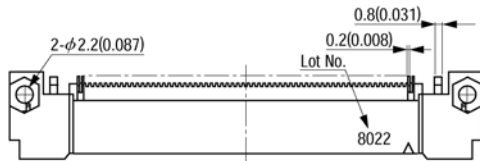
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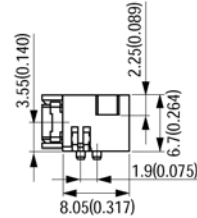
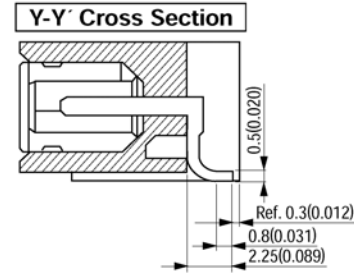
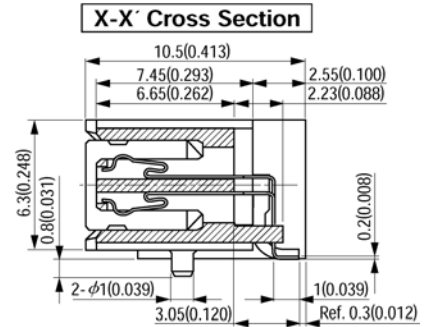
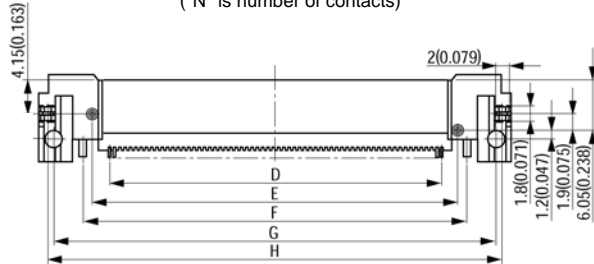
PK10M Series

Plug with Power Contacts and without Standoff

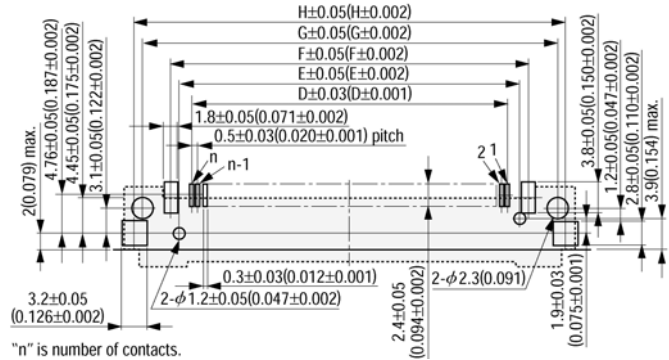
Contact Quantity	A	B	C	D	E	F	G	H
40	36.50	33.20	19.00	19.50	23.28	25.40	32.36	33.98
	[1.437]	[1.307]	[0.748]	[0.768]	[0.917]	[1.000]	[1.274]	[1.338]
50	41.50	38.20	24.00	24.50	28.28	30.40	37.36	38.98
	[1.634]	[1.504]	[0.945]	[0.965]	[1.113]	[1.197]	[1.471]	[1.535]
60	46.50	43.20	29.00	29.50	33.28	35.40	42.36	43.98
	[1.831]	[1.701]	[1.142]	[1.161]	[1.310]	[1.394]	[1.668]	[1.731]
80	56.50	53.20	39.00	39.50	43.28	45.40	52.36	53.98
	[2.224]	[2.094]	[1.535]	[1.555]	[1.704]	[1.787]	[2.061]	[2.125]



("N" is number of contacts)



Printed Circuit Board Layout (Component Side View)



Ordering Information

PK10M - XXXPX - SMX - XX

Contact Quantity
See Table

P = With Power Contacts
Omit = Without Power Contacts

Standoff Height Code:

- R = Without Standoff
- 1 = Standoff Height 1 mm [0.039"]
- 2 = Standoff Height 2 mm [0.079"]
- 3 = Standoff Height 3 mm [0.118"]
- 4 = Standoff Height 4 mm [0.157"]

Plating Suffix:

- TGF = Gold flash with tin-lead tails
- DA = Gold flash overall (RoHS compliant)

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3M™ Pak 10 Media Plug

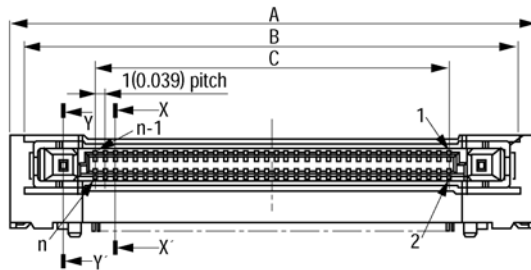
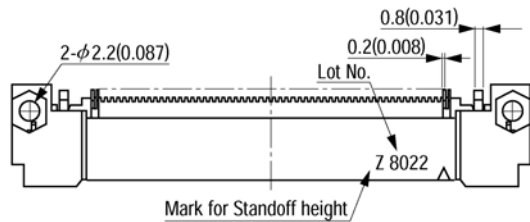
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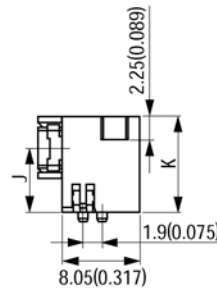
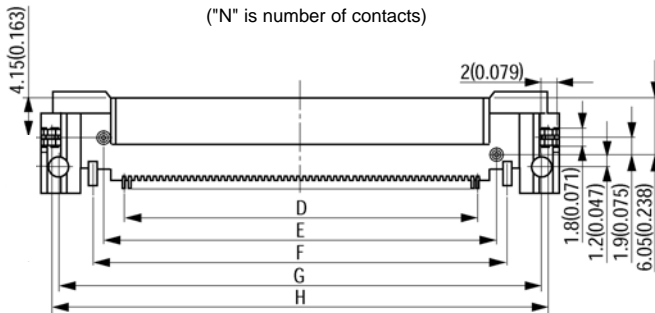
Plug with Power Contacts and Standoff

Contact Quantity	A	B	C	D	E	F	G	H
40	36.50	33.20	19.00	19.50	23.28	25.40	32.36	33.98
	[1.437]	[1.307]	[0.748]	[0.768]	[0.917]	[1.000]	[1.274]	[1.338]
50	41.50	38.20	24.00	24.50	28.28	30.40	37.36	38.98
	[1.634]	[1.504]	[0.945]	[0.965]	[1.113]	[1.197]	[1.471]	[1.535]
60	46.50	43.20	29.00	29.50	33.28	35.40	42.36	43.98
	[1.831]	[1.701]	[1.142]	[1.161]	[1.310]	[1.394]	[1.668]	[1.731]
80	56.50	53.20	39.00	39.50	43.28	45.40	52.36	53.98
	[2.224]	[2.094]	[1.535]	[1.555]	[1.704]	[1.787]	[2.061]	[2.125]

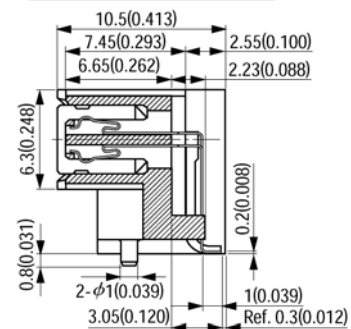
Standoff height	J	K
1	4.55	7.70
	[0.179]	[0.303]
2	5.55	8.70
	[0.219]	[0.343]
3	6.55	9.70
	[0.258]	[0.382]
4	7.55	10.70
	[0.297]	[0.421]



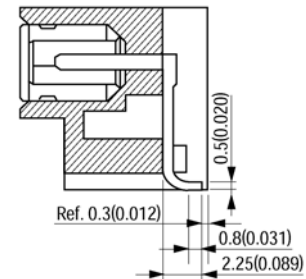
("N" is number of contacts)



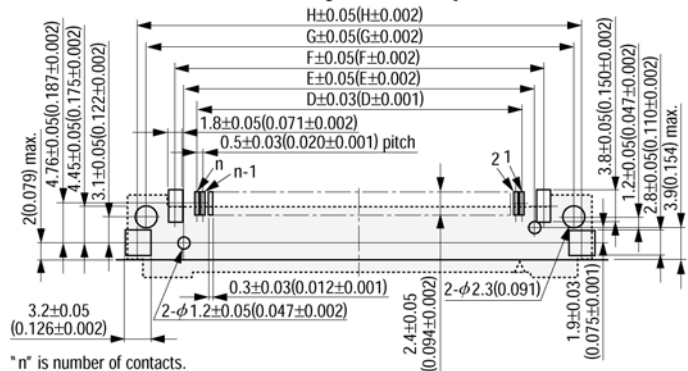
X-X' Cross Section



Y-Y' Cross Section



Printed Circuit Board Layout (Component Side View)



"n" is number of contacts.

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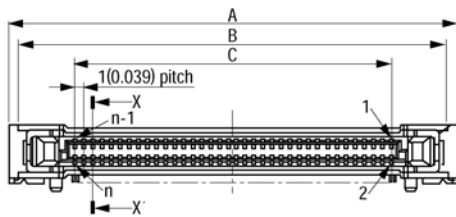
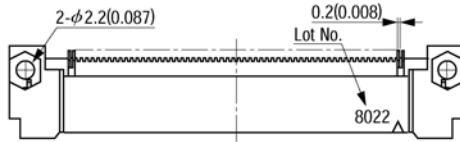
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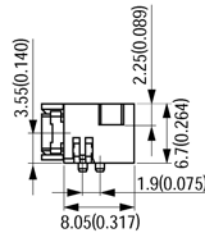
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Plug without Power Contacts and Standoff

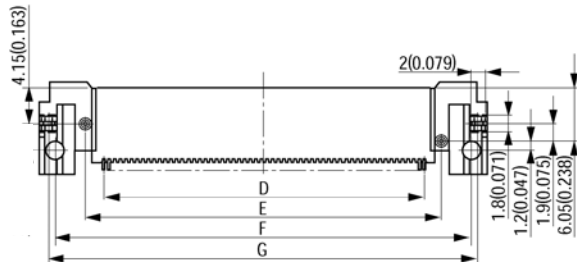
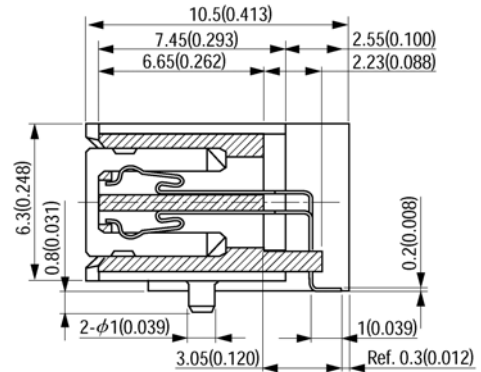
Contact Quantity	A	B	C	D	E	F	G
40	34.50 [1.358]	31.20 [1.228]	19.00 [0.748]	19.50 [0.768]	23.28 [0.917]	30.36 [1.195]	31.98 [1.259]
50	39.50 [1.555]	36.20 [1.425]	24.00 [0.945]	24.50 [0.965]	28.28 [1.113]	35.36 [1.392]	36.98 [1.456]
60	44.50 [1.752]	41.20 [1.622]	29.00 [1.142]	29.50 [1.161]	33.28 [1.310]	40.36 [1.589]	41.98 [1.653]
80	54.50 [2.146]	51.20 [2.016]	39.00 [1.535]	39.50 [1.555]	43.28 [1.704]	50.36 [1.983]	51.98 [2.046]



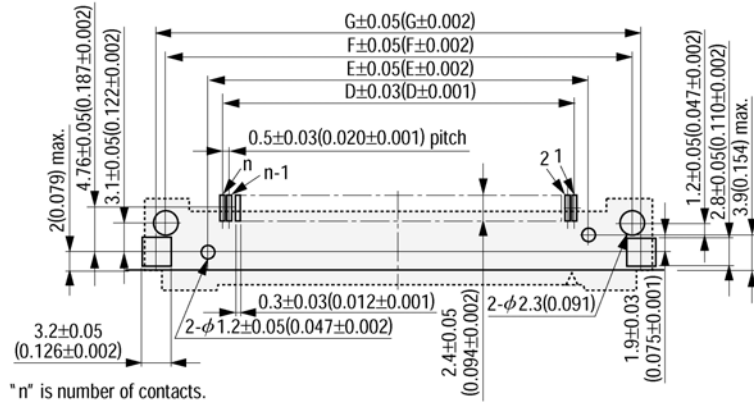
("N" is number of contacts)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



"n" is number of contacts.

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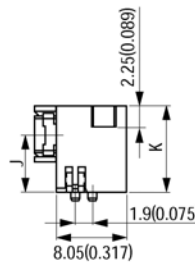
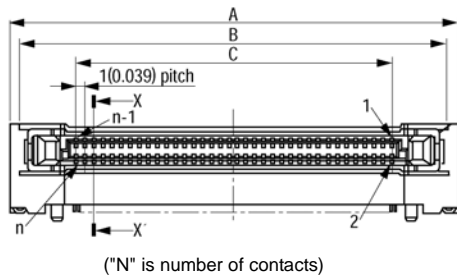
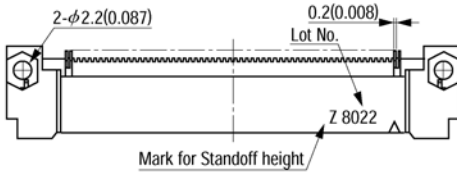
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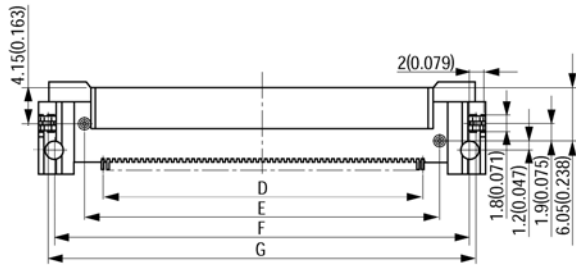
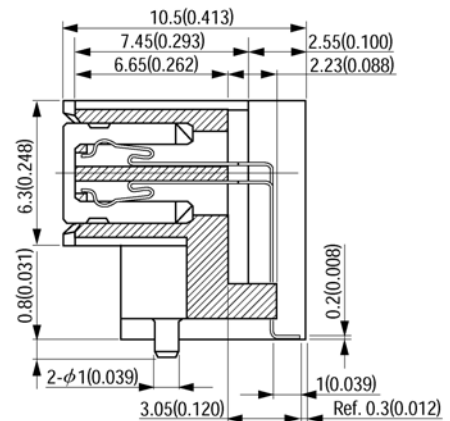
Plug without Power Contacts and with Standoff

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50	39.50	36.20	24.00	24.50	28.28	35.36	36.98
	[1.555]	[1.425]	[0.945]	[0.965]	[1.113]	[1.392]	[1.456]
60	44.50	41.20	29.00	29.50	33.28	40.36	41.98
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80	54.50	51.20	39.00	39.50	43.28	50.36	51.98
	[2.146]	[2.016]	[1.535]	[1.555]	[1.704]	[1.983]	[2.046]

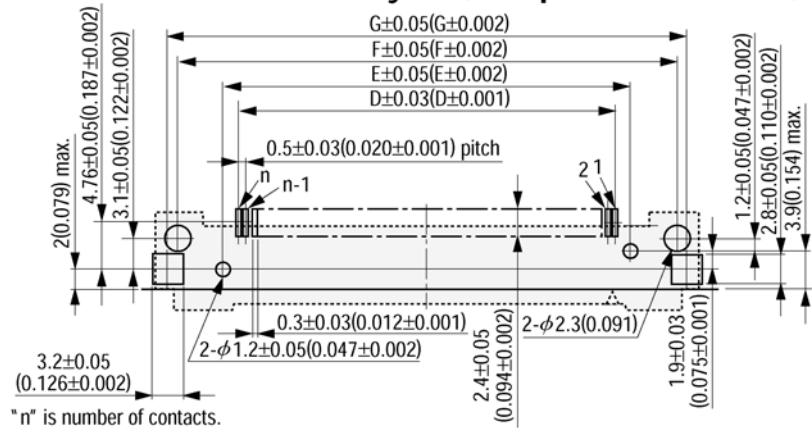
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	[0.219]	[0.343]
3	6.55	9.70
	[0.258]	[0.382]
4	7.55	10.70
	[0.297]	[0.421]



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



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6801 River Place Blvd.
Austin, TX 78726-9000
800/225-5373
www.3M.com/electronics

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