

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

TS-1151-04
Sheet 1 of 5

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.

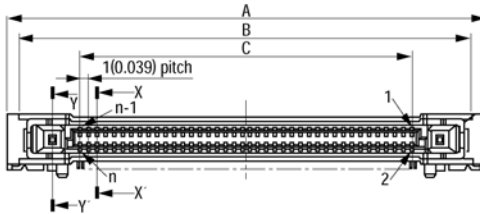
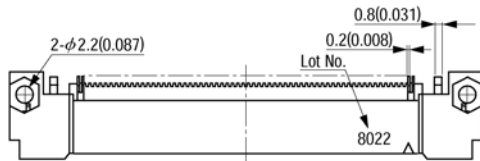
3M™ Pak 10 Media Plug

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

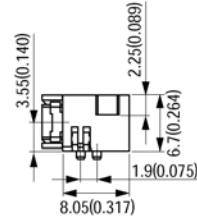
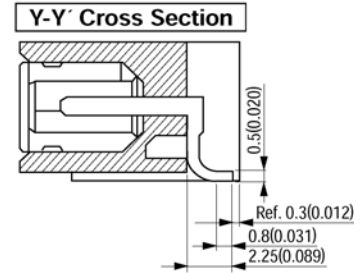
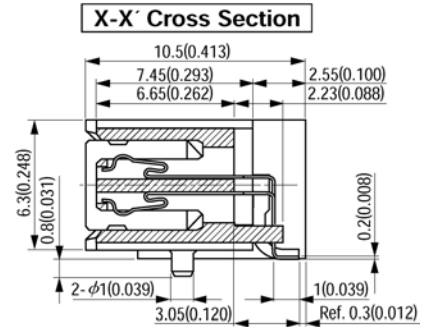
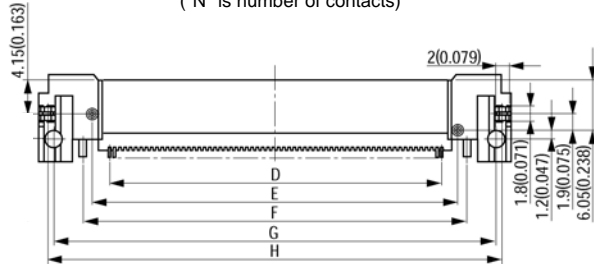
PK10M Series

Plug with Power Contacts and without Standoff

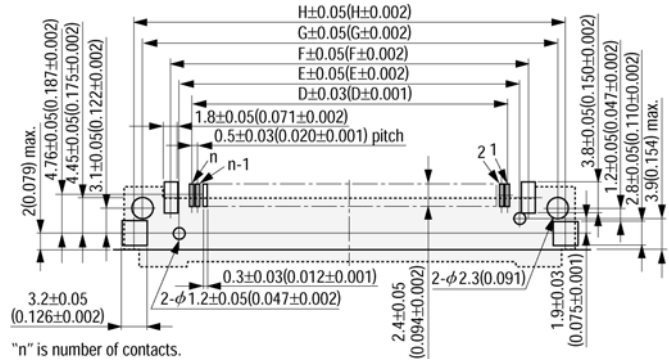
Contact Quantity	A	B	C	D	E	F	G	H
40	36.50	33.20	19.00	19.50	23.28	25.40	32.36	33.98
	[1.437]	[1.307]	[0.748]	[0.768]	[0.917]	[1.000]	[1.274]	[1.338]
50	41.50	38.20	24.00	24.50	28.28	30.40	37.36	38.98
	[1.634]	[1.504]	[0.945]	[0.965]	[1.113]	[1.197]	[1.471]	[1.535]
60	46.50	43.20	29.00	29.50	33.28	35.40	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)

TS-1151-04
Sheet 2 of 5

3M™ Pak 10 Media Plug

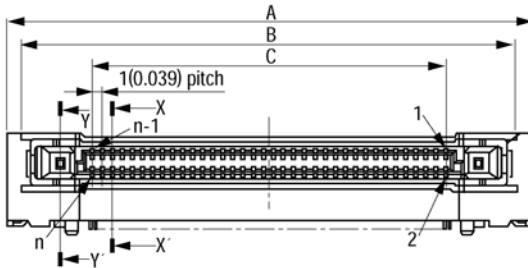
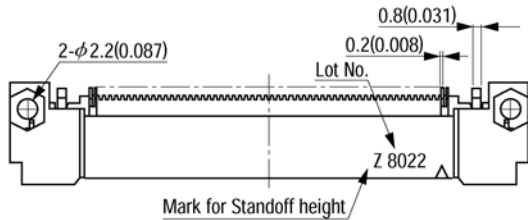
1 mm Right Angle, Surfacemount, With Pwr. Gnd. Option

PK10M Series

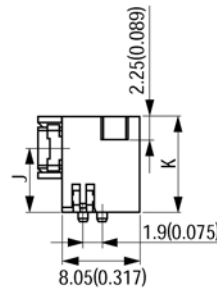
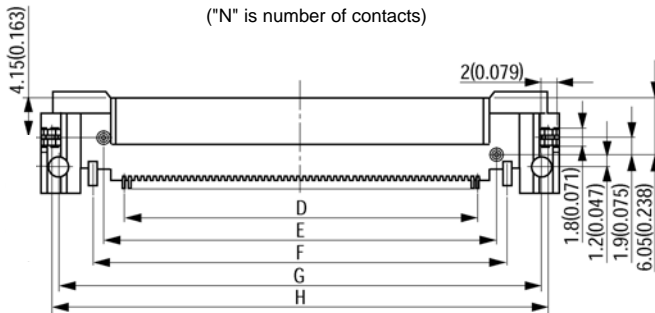
Plug with Power Contacts and Standoff

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]

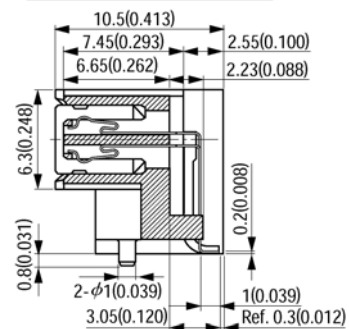
Standoff height	J	K
1	4.55	7.70
	[0.179]	[0.303]
2	5.55	8.70
	[0.219]	[0.343]
3	6.55	9.70
	[0.258]	[0.382]
4	7.55	10.70
	[0.297]	[0.421]



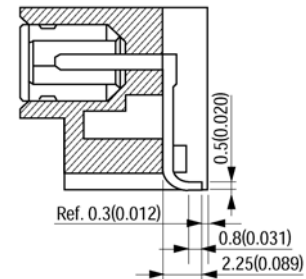
("N" is number of contacts)



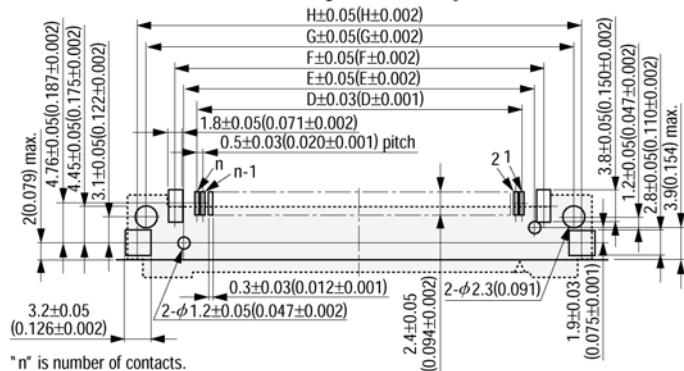
X-X' Cross Section



Y-Y' Cross Section



Printed Circuit Board Layout (Component Side View)



"n" is number of contacts.

TS-1151-04
Sheet 3 of 5

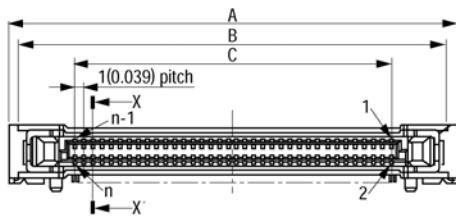
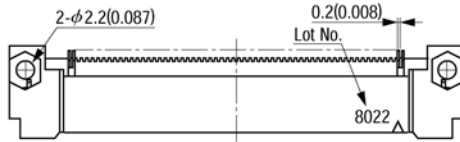
3M™ Pak 10 Media Plug

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

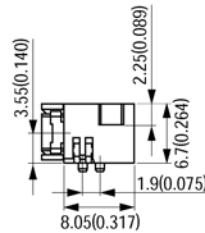
PK10M Series

Plug without Power Contacts and Standoff

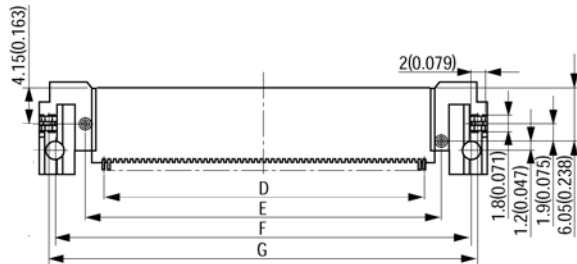
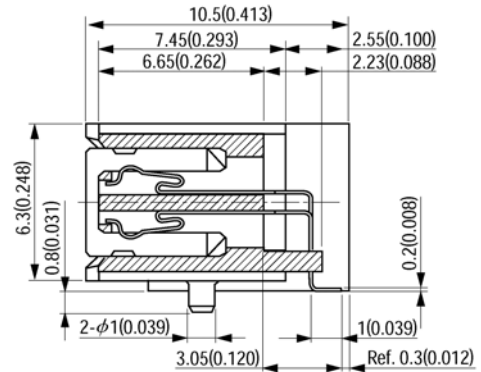
Contact Quantity	A	B	C	D	E	F	G
40	34.50 [1.358]	31.20 [1.228]	19.00 [0.748]	19.50 [0.768]	23.28 [0.917]	30.36 [1.195]	31.98 [1.259]
50	39.50 [1.555]	36.20 [1.425]	24.00 [0.945]	24.50 [0.965]	28.28 [1.113]	35.36 [1.392]	36.98 [1.456]
60	44.50 [1.752]	41.20 [1.622]	29.00 [1.142]	29.50 [1.161]	33.28 [1.310]	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]



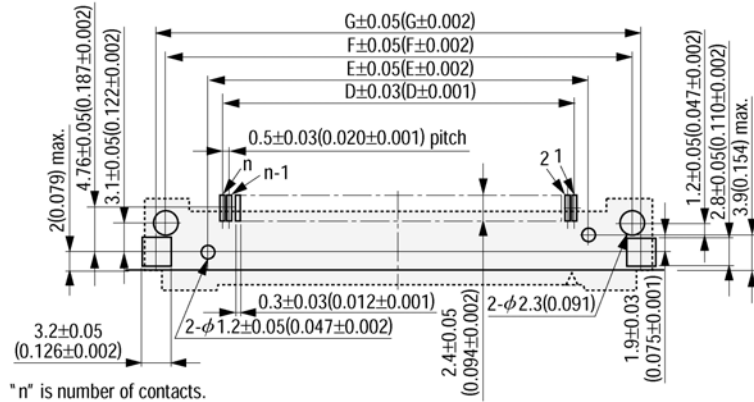
("N" is number of contacts)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



TS-1151-04
Sheet 4 of 5

3M™ Pak 10 Media Plug

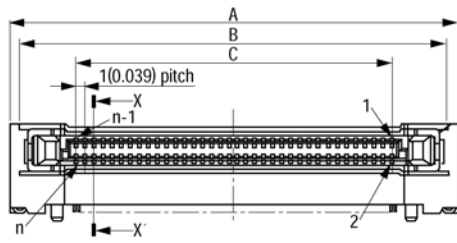
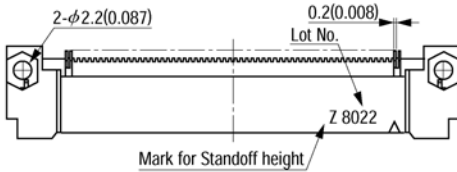
1 mm Right Angle, Surfacemount, With Pwr. Gnd. Option

PK10M Series

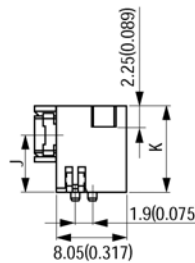
Plug without Power Contacts and with Standoff

Contact Quantity	A	B	C	D	E	F	G
40	34.50	31.20	19.00	19.50	23.28	30.36	31.98
	[1.358]	[1.228]	[0.748]	[0.768]	[0.917]	[1.195]	[1.259]
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
	[1.752]	[1.622]	[1.142]	[1.161]	[1.310]	[1.589]	[1.653]
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]

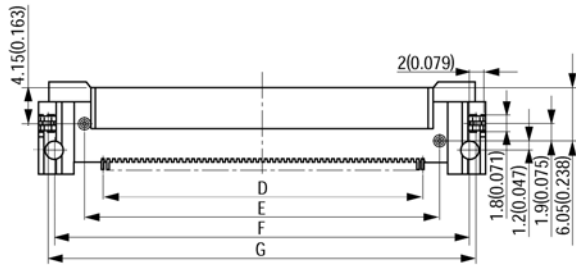
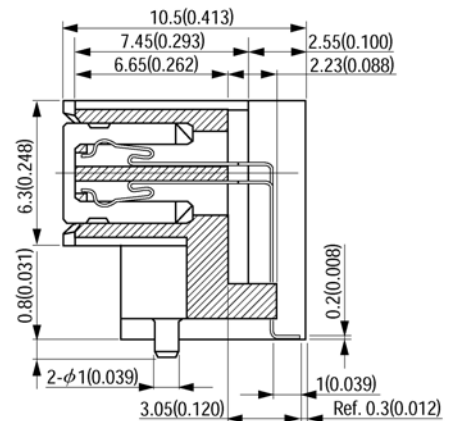
Standoff height	J	K
1	4.55	7.70
	[0.179]	[0.303]
2	5.55	8.70
	[0.219]	[0.343]
3	6.55	9.70
	[0.258]	[0.382]
4	7.55	10.70
	[0.297]	[0.421]



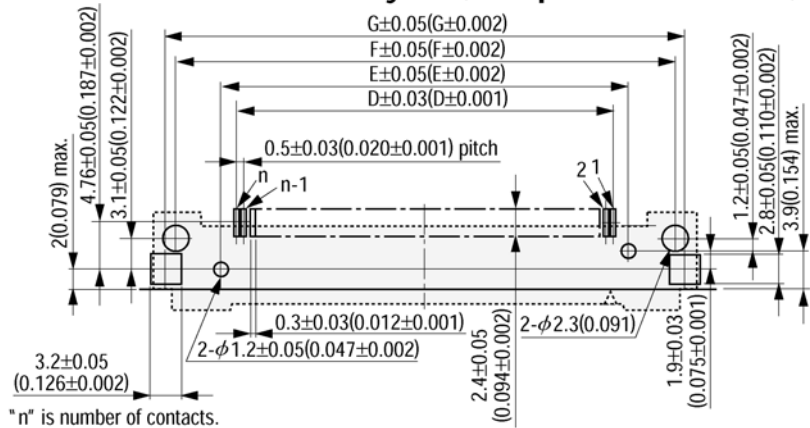
("N" is number of contacts)



X-X' Cross Section



Printed Circuit Board Layout (Component Side View)



TS-1151-04
Sheet 5 of 5

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.



3M Electronics

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

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.**



Minimum 10%
Post-Consumer Fiber

Printed in USA.

© 3M 2007