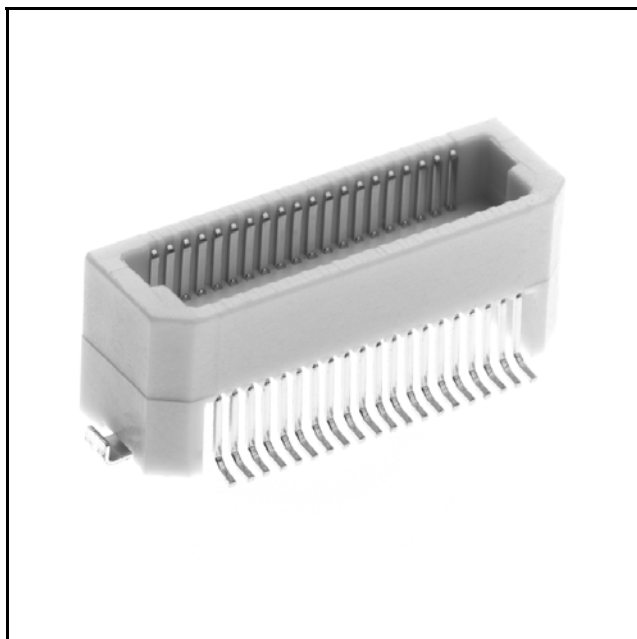


# 3M™ Pak 5 Socket

0.5 mm Straight Stacking, Surface Mount

PK5 Series



- 0.5 mm pitch high density connector conserves board space
- Mated heights available from 4 to 8 mm
- Surface mount design allows for easy inspection and repair of solder joints
- Tape and reel packaging available
- RoHS\* compliant

Date Modified: July 10, 2006

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Sheet 1 of 5

## Physical

### Insulation

Material: Glass filled LCP  
Flammability: UL 94V-0  
Color: White

### Contact

Material: Copper Alloy

### Plating

Underplating: Nickel  
Wiping Area: 2  $\mu$ " [ 0.05  $\mu$ m ] min. Gold over Nickel  
Solder Tails: Gold over Nickel

## Electrical

**Current Rating:** 0.3 A

**Insulation Resistance:** 10<sup>3</sup> M $\Omega$  min at 250 VDC

**Withstanding Voltage:** 200 VAC for 1 minute

## Environmental

**Temperature Rating:** -55°C to +85°C

**Process Rating:** 260°C (per J-STD-020C)

\* RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment  
"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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# 3M™ Pak 5 Socket

0.5 mm Straight Stacking, Surface Mount

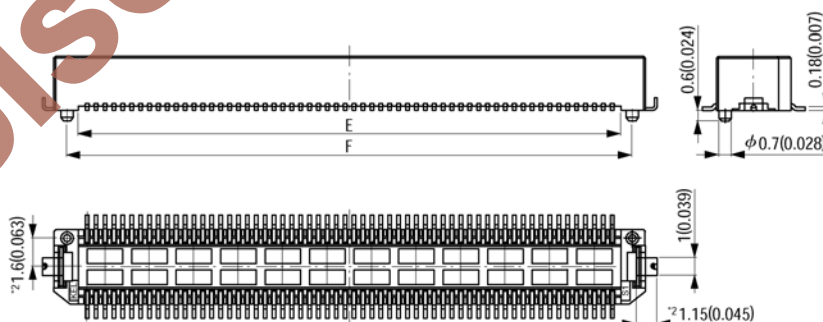
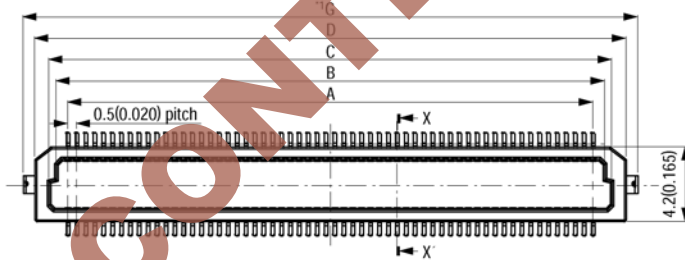
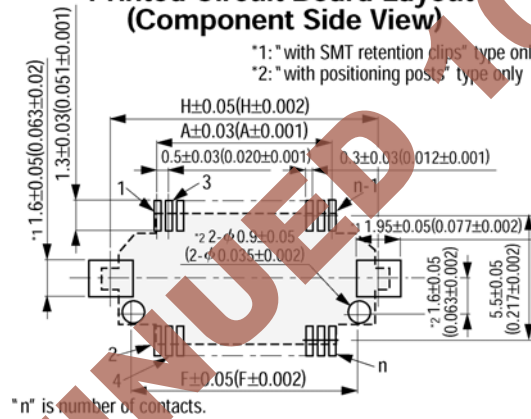
PK5 Series

Socket for 4 and 6 mm stacked height.

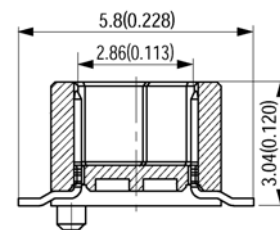
Product Table / Dimensions

| Contact Quantity | A       | B       | C       | D       | E       | F       | G       | H       |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| 40               | 9.50    | 10.82   | 11.62   | 13.22   | 10.50   | 11.76   | 14.54   | 13.59   |
|                  | [0.374] | [0.426] | [0.457] | [0.520] | [0.413] | [0.463] | [0.572] | [0.535] |
| 50               | 12.00   | 13.32   | 14.12   | 15.72   | 13.00   | 14.26   | 17.04   | 16.09   |
|                  | [0.472] | [0.524] | [0.556] | [0.619] | [0.512] | [0.561] | [0.671] | [0.633] |
| 60               | 14.50   | 15.82   | 16.62   | 18.22   | 15.50   | 16.76   | 19.54   | 18.59   |
|                  | [0.571] | [0.623] | [0.654] | [0.717] | [0.610] | [0.660] | [0.769] | [0.732] |
| 80               | 19.50   | 20.82   | 21.62   | 23.22   | 20.50   | 21.76   | 24.54   | 23.59   |
|                  | [0.768] | [0.820] | [0.851] | [0.914] | [0.807] | [0.857] | [0.966] | [0.929] |
| 100              | 24.50   | 25.82   | 26.62   | 28.22   | 25.50   | 26.76   | 29.54   | 28.59   |
|                  | [0.965] | [1.017] | [1.048] | [1.111] | [1.004] | [1.054] | [1.163] | [1.126] |
| 120              | 29.50   | 30.82   | 31.62   | 33.22   | 30.50   | 31.76   | 34.54   | 33.59   |
|                  | [1.161] | [1.213] | [1.245] | [1.308] | [1.201] | [1.250] | [1.360] | [1.322] |
| 140              | 34.50   | 35.82   | 36.62   | 38.22   | 35.50   | 36.76   | 39.54   | 38.59   |
|                  | [1.358] | [1.410] | [1.442] | [1.505] | [1.398] | [1.447] | [1.557] | [1.519] |
| 160              | 39.50   | 40.82   | 41.62   | 43.22   | 40.50   | 41.76   | 44.54   | 43.59   |
|                  | [1.555] | [1.607] | [1.639] | [1.702] | [1.594] | [1.644] | [1.754] | [1.716] |

Printed Circuit Board Layout  
(Component Side View)



X-X' Cross Section



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# 3M™ Pak 5 Socket

0.5 mm Straight Stacking, Surface Mount

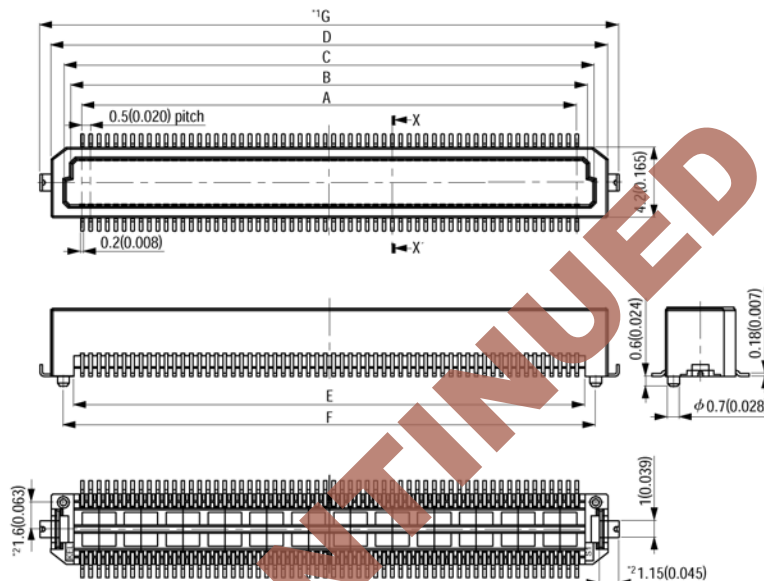
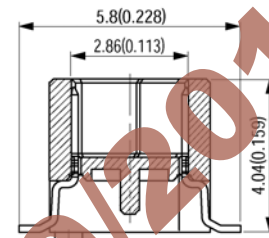
PK5 Series

Socket for 5 and 7 mm stacked height.

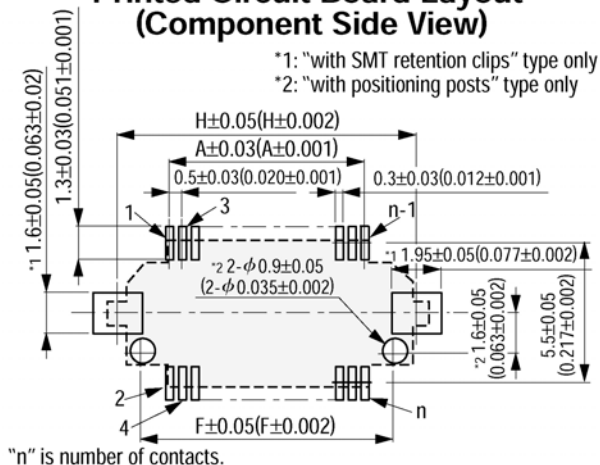
Product Table / Dimensions

| Contact Quantity | A                | B                | C                | D                | E                | F                | G                | H                |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 40               | 9.50<br>[0.374]  | 10.82<br>[0.426] | 11.62<br>[0.457] | 13.22<br>[0.520] | 10.50<br>[0.413] | 11.76<br>[0.463] | 14.54<br>[0.572] | 13.59<br>[0.535] |
| 50               | 12.00<br>[0.472] | 13.32<br>[0.524] | 14.12<br>[0.556] | 15.72<br>[0.619] | 13.00<br>[0.512] | 14.26<br>[0.561] | 17.04<br>[0.671] | 16.09<br>[0.633] |
| 60               | 14.50<br>[0.571] | 15.82<br>[0.623] | 16.62<br>[0.654] | 18.22<br>[0.717] | 15.50<br>[0.610] | 16.76<br>[0.660] | 19.54<br>[0.769] | 18.59<br>[0.732] |
| 80               | 19.50<br>[0.768] | 20.82<br>[0.820] | 21.62<br>[0.851] | 23.22<br>[0.914] | 20.50<br>[0.807] | 21.76<br>[0.857] | 24.54<br>[0.966] | 23.59<br>[0.929] |
| 100              | 24.50<br>[0.965] | 25.82<br>[1.017] | 26.62<br>[1.048] | 28.22<br>[1.111] | 25.50<br>[1.004] | 26.76<br>[1.054] | 29.54<br>[1.163] | 28.59<br>[1.126] |
| 120              | 29.50<br>[1.161] | 30.82<br>[1.213] | 31.62<br>[1.245] | 33.22<br>[1.308] | 30.50<br>[1.201] | 31.76<br>[1.250] | 34.54<br>[1.360] | 33.59<br>[1.322] |
| 140              | 34.50<br>[1.358] | 35.82<br>[1.410] | 36.62<br>[1.442] | 38.22<br>[1.505] | 35.50<br>[1.398] | 36.76<br>[1.447] | 39.54<br>[1.557] | 38.59<br>[1.519] |
| 160              | 39.50<br>[1.555] | 40.82<br>[1.607] | 41.62<br>[1.639] | 43.22<br>[1.702] | 40.50<br>[1.594] | 41.76<br>[1.644] | 44.54<br>[1.754] | 43.59<br>[1.716] |

X-X' Cross Section



Printed Circuit Board Layout  
(Component Side View)



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Sheet 3 of 5

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# 3M™ Pak 5 Socket

0.5 mm Straight Stacking, Surface Mount

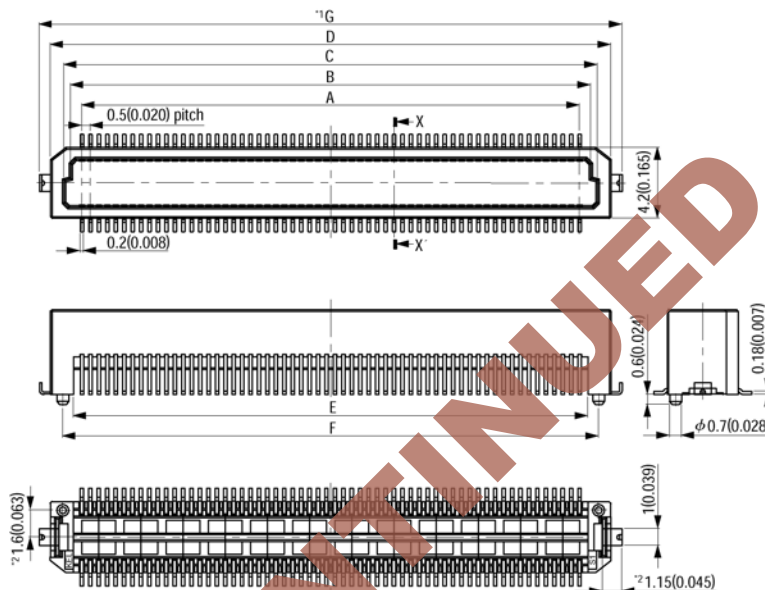
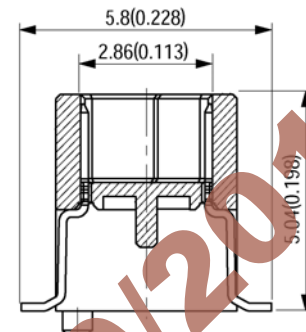
PK5 Series

Socket for 6 and 8 mm stacked height.

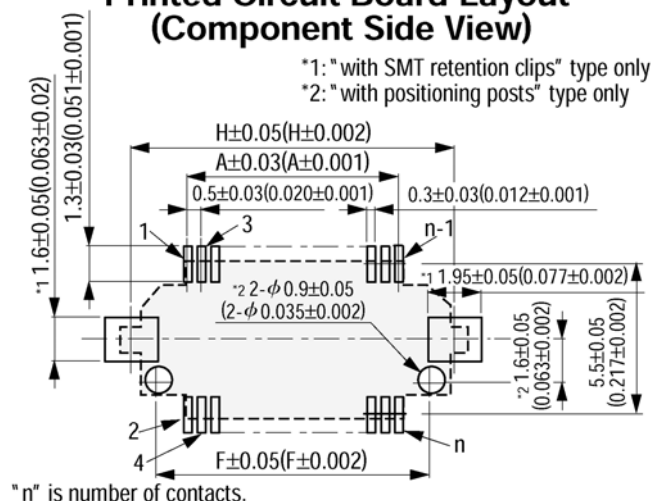
Product Table / Dimensions

| Contact Quantity | A                | B                | C                | D                | E                | F                | G                | H                |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 40               | 9.50<br>[0.374]  | 10.82<br>[0.426] | 11.62<br>[0.457] | 13.22<br>[0.520] | 10.50<br>[0.413] | 11.76<br>[0.463] | 14.54<br>[0.572] | 13.59<br>[0.535] |
| 50               | 12.00<br>[0.472] | 13.32<br>[0.524] | 14.12<br>[0.556] | 15.72<br>[0.619] | 13.00<br>[0.512] | 14.26<br>[0.561] | 17.04<br>[0.671] | 16.09<br>[0.633] |
| 60               | 14.50<br>[0.571] | 15.82<br>[0.623] | 16.62<br>[0.654] | 18.22<br>[0.717] | 15.50<br>[0.610] | 16.76<br>[0.660] | 19.54<br>[0.769] | 18.59<br>[0.732] |
| 80               | 19.50<br>[0.768] | 20.82<br>[0.820] | 21.62<br>[0.851] | 23.22<br>[0.914] | 20.50<br>[0.807] | 21.76<br>[0.857] | 24.54<br>[0.966] | 23.59<br>[0.929] |
| 100              | 24.50<br>[0.965] | 25.82<br>[1.017] | 26.62<br>[1.048] | 28.22<br>[1.111] | 25.50<br>[1.004] | 26.76<br>[1.054] | 29.54<br>[1.163] | 28.59<br>[1.126] |
| 120              | 29.50<br>[1.161] | 30.82<br>[1.213] | 31.62<br>[1.245] | 33.22<br>[1.308] | 30.50<br>[1.201] | 31.76<br>[1.250] | 34.54<br>[1.360] | 33.59<br>[1.322] |
| 140              | 34.50<br>[1.358] | 35.82<br>[1.410] | 36.62<br>[1.442] | 38.22<br>[1.505] | 35.50<br>[1.398] | 36.76<br>[1.447] | 39.54<br>[1.557] | 38.59<br>[1.519] |
| 160              | 39.50<br>[1.555] | 40.82<br>[1.607] | 41.62<br>[1.639] | 43.22<br>[1.702] | 40.50<br>[1.594] | 41.76<br>[1.644] | 44.54<br>[1.754] | 43.59<br>[1.716] |

X-X' Cross Section



Printed Circuit Board Layout  
(Component Side View)



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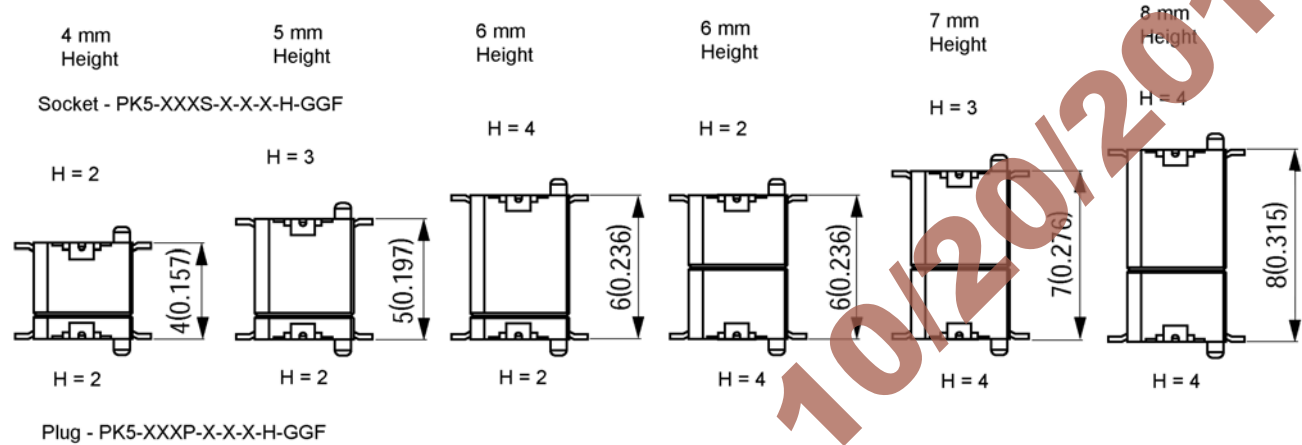
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# 3M™ Pak 5 Socket

0.5 mm Straight Stacking, Surface Mount

PK5 Series

## STACKED MATING COMBINATIONS



## Ordering Information

PK5 - XXXS - X - X - X - X - GGF

Contact Quantity  
See Table

C = With Retention Clips  
(Tape and Reel only)  
Omit = Without Clips

L = With Location Posts  
Omit = Without Posts

T = Tape and Reel  
Omit = In Tube

2 = Mating Height of 4 and 6 mm  
3 = Mating Height of 5 and 7 mm  
4 = Mating Height of 6 and 8 mm

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Minimum 10%  
Post-Consumer Fiber

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