

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

Date Modified: July 25, 2006

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Physical

Insulation

Material: Glass filled LCP

Flammability: UL 94V-0

Color: White

Contact

Material: Copper Alloy

Plating

Underplating: Nickel

Wiping Area 2 μ" [0.05 μm] min. Gold over Nickel

Solder Tails: Gold over Nickel

Electrical

Current Rating: 0.3 A

Insulation Resistance: $10^3 \text{ M}\Omega \text{ min at } 250 \text{ VDC}$ Withstanding Voltage: 200 VAC for 1 minute

Environmental

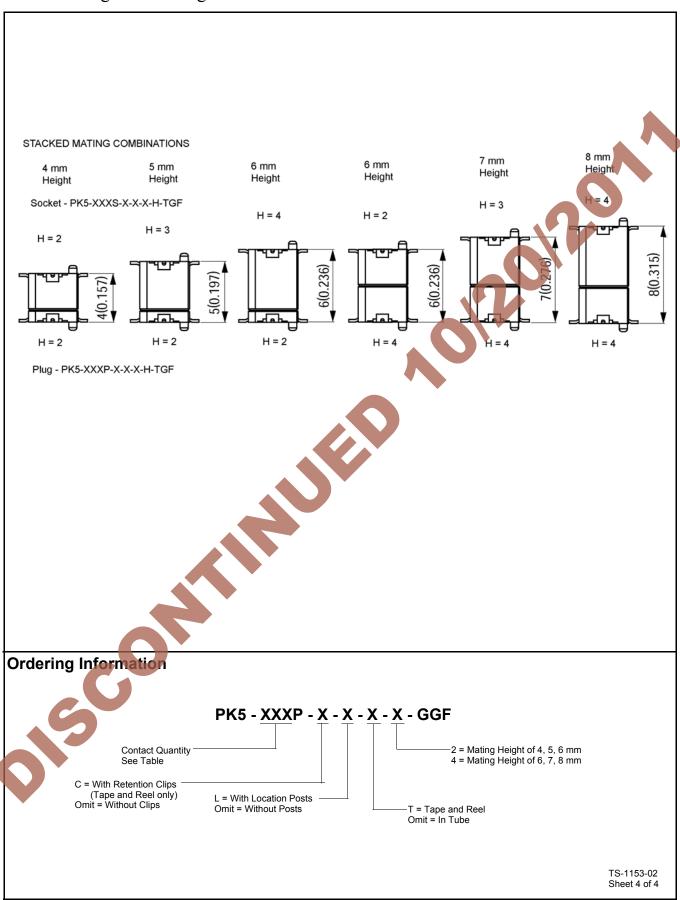
Temperature Rating: -55°C to +85°C

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.

Plug for 4. 5. 6 mm stacked height. **Product Table / Dimensions** C D F Н Quantity 9.50 11.52 13.22 10.50 14.54 40 10.62 11.76 13.59 [0.535] [0.374] [0.418] [0.454] [0.520] [0.413] [0.463] [0.572] 14.02 50 12.00 13.12 15.72 13.00 14.26 17.04 16.09 [0.472] [0.517] [0.552] [0.619] [0.512] [0.561] [0.671] [0.633]60 14.50 15.62 16.52 18.22 15.50 16.76 19.54 18.59 [0.717] [0.769] [0.732] [0.571] [0.615][0.650][0.610][0.660]80 19.50 21.52 23.22 20.50 24.54 23.59 20.62 21.76 [0.914] [0.768] [0.812] [0.847] [0.807] [0.857] [0.966][0.929] 100 24.50 26.52 26.76 29.54 28.59 25.62 28.22 25.50 [0.965] [1.009] [1.044] [1.111] [1.004] [1.054] [1.163] [1.126] 120 29.50 31.52 33.22 33.59 30.62 30.50 31.76 34.54 [1.161] [1.206] [1.241] [1.308] [1.201] [1.250] [1.360] [1.322] 140 34.50 35.62 36.52 38.22 35.50 36.76 39.54 38.59 [1.358] [1.402] [1.438] [1.505] [1.398] [1.447] [1.557] [1.519] 160 39.50 40.62 41.52 43.22 40.50 41.76 44.54 43.59 [1.599] [1.635] [1.702] [1.594] [1.644] [1.754] X-X´ Cross Section 5.8(0.228) 2.65(0.104) 3.02(0.119) 0.5(0.020) pitch 0.500.020) pitch **Printed Circuit Board Layout** (Component Side View) $.3\pm0.03(0.051\pm0.001)$ *1: "with SMT retention clips" type only 11.6±0.05(0.063±0.002) *2: "with positioning posts" type only 18(0.007) H±0.05(H±0.002) F±0.05(F±0.002) A±0.03(A±0.001) 0.5±0.03(0.020±0.001) 0.3±0.03(0.012±0.001) 7.1.95±0.002) 1.1.95±0.002) 1.1.95±0.002) 1.1.95±0.002) 22-φ0.9±0.05 21.15(0.045) "n" is number of contacts. TS-1153-02 Sheet 2 of 4

Plug for 6, 7, 8 mm stacked height. **Product Table / Dimensions** Contact X-X´ Cross Section A В \mathbf{C} D E F \mathbf{G} H Quantity 9.50 10.62 11.52 13.22 10.50 11.76 14.54 13.59 [0.374] [0.418] [0.454][0.520][0.413][0.463][0.572][0.535]5.8(0.228) 50 12.00 13.12 14.02 13.00 14.26 15.72 17.04 16.09 [0.671] [0.472][0.517][0.552][0.619][0.512][0.561][0.633]2.65(0.104) 60 14.50 15.62 16.52 18.22 15.50 16.76 19.54 18.59 [0.717] [0.571] [0.615] [0.650][0.610] [0.660] [0.769] [0.732]80 19.50 20.62 21.52 23.22 20.50 21.76 24.54 23.59 [0.768][0.914][0.807][0.857][0.966][0.929][0.812][0.847]198) 100 24.50 25.62 26.52 28.22 25.50 26.76 29.54 28.59 5.02(0.7 [0.965] [1.009] [1.044] [1.054] [1.111] [1.004] [1.163] [1.126] 120 29.50 30.62 31.52 33.22 30.50 31.76 34.54 33.59 [1.308] [1.360] [1.161] [1.206] [1.241] [1.201] [1.250] [1.322] 140 34.50 35.62 36.52 38.22 35.50 36.76 38.59 39.54 [1.358] [1.402] [1.438] [1.505] [1.398] [1.447] [1.557] [1.519] 160 39.50 40.62 41.52 43.22 40.50 41.76 44.54 43.59 [1.555] [1.599] [1.635] [1.702] [1.594] [1.644] [1.754] 0.5(0.020) pitch ϕ 0.7(0.028) 0.6(0.0 **Printed Circuit Board Layout** 21.15(0.045) (Component Side View) $.3\pm0.03(0.051\pm0.001)$ *1: "with SMT retention clips" type only $11.6\pm0.05(0.063\pm0.002)$ *2: "with positioning posts" type only H±0.05(H±0.002) F±0.05(F±0.002) A±0.03(A±0.001) 0.5±0.03(0.020±0.001) 0.3±0.03(0.012±0.001) 0.027 1.065 1. 2 2-¢0.9±0.05 $(2-\phi 0.035\pm 0.002)$ "n" is number of contacts. TS-1153-02 Sheet 3 of 4





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