3M[™] Pak 50 Low Profile Socket

.050" Vertical Stacking with and without Flanges

P50L Series



- Low profile offers mating heights between 0.276" 0.472" (7-12 mm) for board stacking applications
- High temperature insulator compatible with IR and wave soldering
- Guide posts for easy mating/unmating
- Retention clips stabilize connector to the board during wave soldering
- 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 4, 2010

TS-2054-C Sheet 1 of 3

Physical

Insulator:

Material: Glass Filled PPS

Flammability: UL 94V-0

Color: Brown

Alignment Plate: Glass Filled Nylon (Brown)

Contact Material: Phosphor Bronze

Plating:

Underplating: Nickel
Wiping Area: Gold Flash
Solder Tails: Gold Flash

Retaining Clips: Tin-Copper

Mating Compatibility: TS-1145, TS-1161, TS-2053

Electrical

Current Rating: 0.5 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at $500 V_{DC}$ **Withstanding Voltage:** $650 V_{AC}$ for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

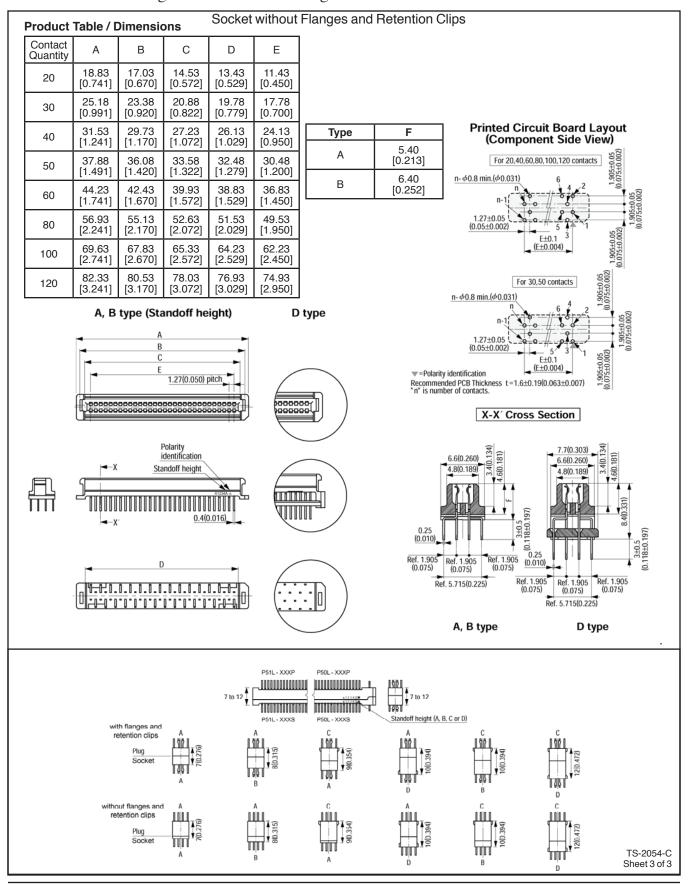
Process Rating: 260°C MSL1 (per J-STD-020C)

UL File No.: E68080

.050" Vertical Stacking with and without Flanges

Socket with Flanges and Retention Clips **Product Table / Dimensions** Contact F G Type Quantity 3.50 5.40 Α 25.43 20.32 17.03 15.43 11.43 [0.138][0.213]20 [1.001][0.800][0.670][0.607][0.450]4.50 6.40 В 31.78 26.67 23.38 21.78 17.78 [0.177][0.252] 30 [1.251] [1.050] [0.920] [0.700] [0.857] 6.50 NA D 24.13 [0.950] 38.13 33.02 29.73 28.13 [0.256]NA 40 [1.501] [1.300][1.170][1.107]44.48 39.37 36.08 34.48 30.48 50 [1.751][1.550][1.420][1.357][1.200]**Printed Circuit Board Layout** 50.83 45.72 42.43 40.83 36.83 (Component Side View) 60 [2.001] [1.800] [1.670] [1.607] [1.450] For 20,40,60,80,100,120 contacts 49.53 63.53 58.42 53.53 55.13 80 n- φ0.8 min.(φ0.031) [2.501] [2.300] [1.950][2.170] [2.107] 2-\phi 2.3\pm 0.1 (\phi 0.091\pm 0.004) 71.12 67.83 62.23 76.23 66.23 100 [3.001][2.800] [2.670][2.607][2.450]88.93 83.82 80.53 78.93 74.93 1.27±0.05(0.05±0.002) 120 [3.501] [3.300] [3.170] [3.107][2.950] E±0.1(E±0.004) B±0.15(B±0.006) For 30.50 contacts ϕ 0.8 min.(ϕ 0.031) D type A, B type (Standoff height) 1.27±0.05(0.05±0.002) E±0.1(E±0.004) =Polarity identification Recommended PCB Thickness $t=1.6\pm0.19(0.063\pm0.007)$ "n" is number of contacts. X-X' Cross Section Polarity identification 7.7(0.303) 6.6(0.260) Ref. 1.905 Ref. 1.905 Ref. 1.905 Ref. 1.905 (0.075) Ref. 1.905 (0.075) Ref. 1.905 (0.075) Ref. 5.715(0.225) Ref. 5.715(0.225) Plugs/Sockets with flanges and retention clips are not interchangeable A, B type D type with plugs/sockets without flanges and retention clips **Ordering Information** P5XL - XXXS - X - DA (RIA E1 and C1 apply) 0 = With Flanges and Retention Clips A = Type AB = Type B1 = Without Flanges and Retention Clips D = Type D**Contact Quantity** See Table TS-2054-C Sheet 2 of 3

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