.050" Surfacemount Socket .276" and .315" Mating Heights

**P50L Series** 



- Low profile 0.276" 0.315" (7-8 mm) addresses surfacemount board stacking applications
- High temperature insulator compatible with IR and wave soldering
- Solder brackets increase connector stability to protect contact solder joint integrity
- Polarized alignment posts ensure correct mating
- 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: February 17, 2010

TS-2055-B Sheet 1 of 2

# **Physical**

#### **Insulator:**

Material: Glass Filled PPS

Flammability: UL 94V-0

Color: Brown

Contact Material: Phosphor Bronze

#### **Plating:**

Underplating: Nickel

Wiping Area: Gold Flash

Solder Tails: Gold Flash

Retaining Clips: Tin-Copper

Mating Compatibility: TS-2056

## **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" Surfacemount Socket .276" and .315" Mating Heights

#### **Product Table / Dimensions** Contact **Printed Circuit Board Layout** D Quantity (Component Side View) 24.03 21.03 17.03 14.23 13.43 14.23 11.43 \*Ref. $\phi$ 1.9±0.05 [0.946][0.828][0.670][0.560][0.529][0.450][0.560](0.075±0.002) B±0.1(B±0.004) 30.38 27.38 23.38 20.58 19.78 17.78 φ1.6±0.05 F±0.1(F±0.004) 30 [1.196][1.078] [0.920][0.810][0.779][0.700](0.063±0.002) Ref. $\phi$ 1.4±0.05 0.8±0.05 1.27±0.05 (0.031±0.002) (0.055±0.002) 4±0.05 36.73 33.73 29.73 26.93 26.13 24.13 26.93 (0.157±0.002) $\phi$ 1.1+0.05 40 (0.050±0.002) [1.060] [1.029] [0.950] [1.060] (0.043±0.002) [1.446] [1 328] [1.170] 43.08 40.08 36.08 33.28 32.48 30.48 33.28 50 [1.696][1.578][1.420][1.310][1.279][1.200][1.310]49.43 46.43 42.43 39.63 38.83 36.83 39.63 60 [1.946][1.828] [1.670][1.560][1.529][1.450][1.560]2.2±0.05 0.087±0.002) 62.13 59.13 55.13 52.33 51.53 49.53 52.33 80 [2.446] [2.060] [2.029] [2.060] [2.328] [2.170][1.950]74.83 71.83 67.83 65.03 64.23 62.23 65.03 100 [2.946][2.828][2.670][2.560] [2.529][2.450][2.560]=Polarity identification 87.53 84.53 80.53 77.73 76.93 74.93 77.73 "n" is number of contacts. 120 [3.446][3.328][3.170][3.060][3.029][2.950][3.060]\* 1.9 and 1.4 are the recommend hole sizes when using automated placement equipment. Precision of the placement equipment should be considered. A Type (Standoff height) B Type В X-X' Cross Section 1.27(0.050) pitch\_ \$ .25(0 •••••••••••••••••••••••• 3(0.118) Standoff height Polarity identification А Туре B Type 0.4(0.016) $\overline{\phi}$ 1.6(0.063) 0.4(0.016) Y-Y' Cross Section $\phi$ 1.1(0.043) 10.25(0.404) 10.25(0.404) 6.6(0.260) 6.6(0.260) A Type В Туре **Ordering Information** P50L - XXXS - XX - DA (RIA E1 and C1 apply) Contact Quantity: AS = SMT, Type A See Table BS = SMT, Type B TS-2055-B Sheet 2 of 2

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6801 River Place Blvd. Austin, TX 78726-9000

www.3Mconnector.com

U.S.A. 1-800-225-5373

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