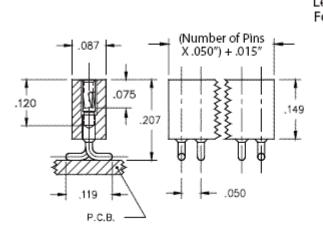
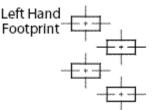
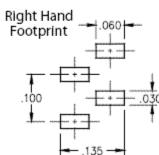
DATA SHEET



# Product Number: 851-44-002-30-002000







## Description:

Interconnect Socket .050 Grid; Surface Mount Socket Single Row Gull Wing; Right Hand Footprint Single Row Surface Mount Accepts .015-.022" Leads **Plating Code:** 

# 44

## Shell Plating:

200 μ" Tin (matte finish) over 100 μ" Nickel Inner Contact Plating:

100  $\mu^{\text{"}}$  Tin (matte finish) over 50  $\mu^{\text{"}}$  Nickel

Coplanarity .005". For Pin Counts > 20 Consult Tech Support

| #<br>Of<br>Pins | Mill-Max<br>Part<br>Number | RoHS<br>Compliant |
|-----------------|----------------------------|-------------------|
|                 |                            | •                 |

2

851-44-002-30-002000

#### CONTACT:

Contact Used: #11, Standard 3 Finger Contact Current Rating = 3 Amps

# BERYLLIUM COPPER ALLOY 172 (UNS C17200) per ASTM B 194

#### **Properties of BERYLLIUM COPPER:**

- Chemical composition: Cu 98.1%, Be 1.9%
- Temper as stamped: TD01

Properties after heat treatment (TH01):

- Hardness: 36-43 Rockwell C
- Mechanical Life: 100 Cycles Min.
- Density: .298 lbs/in3
- Electrical Conductivity: 22% IACS\*
- Resistance: 10 miliohms Max
- Operating Temperature: -55°C/+125°C
- Melting point: 980°C/865°C (liquidus/solidus)

• Stress Relaxation<sup>†</sup>: 96% of stress remains after 1,000 hours @ 100 °C ; 70% of stress remains after 1,000 hours @ 200 °C

\*International Annealed Copper Standard, i.e. as a % of pure copper.

<sup>†</sup>Since BeCu loses its spring properties over time at high temperatures; it is rated for continuous use up to 150°C. For applications up to 300°C, Mill-Max offers many contacts in Beryllium Nickel. Contact Tech Support for more info.





# LOOSE PIN:

Loose Pin Used: 4890 BRASS ALLOY (UNS C36000) per ASTM B 16

# **Properties of BRASS ALLOY:**

- Chemical composition: Cu 61.5%, Zn 35.4%, Pb 3.1%<sup>+</sup>
- Hardness as machined: 80-90 Rockwell B
- Density: .307 lbs/in3
- Electrical conductivity: 26% IACS\*
- Melting point: 900°C/885°C (liquidus/solidus)

+(3 to 4% lead is used to permit "free machining" and is permitted by EC Directive 2002/95Annex 6; so all pin materials are RoHS compliant)

\*International Annealed Copper Standard, i.e. as a % of pure copper.

#### **INSULATOR INFORMATION:**

PCT Polyester, (Thermx CG933, black)

High Temperature

# **Properties of PCT Polyester:**

- Brand: Thermx
- Grade: CG-933
- Rated voltage: 100 VRMS/150 VDC
- Insulation resistance: 10,000 Megaohms min.
- Material Heat Deflection Temp (per ASTM D 648): 529°F (276°C) @ 66 psi
- Dielectric strength: 1000 VRMS min. (700 VRMS min. for series 117 Shrink DIP)

Note: Materials above 446°F (230°C) are considered suitable for "eutectic" reflow soldering, above 500°F (260°C) for "lead-free" reflow soldering.