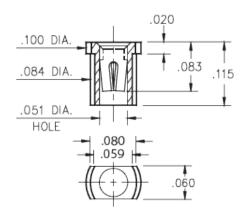
# **DATA SHEET**

Product Number: 8806-0-58-80-47-27-40-0



#### **Description:**

**8806** - Surface Mount Receptacle Accepts .025-.037 .025 sq post diameter

#### Packaging:

Packaged on Tape & Reel 4,000 per 13" reel

## 8806-0-18-XX-47-XX-40-0

Surface mount

Also available on 12mm wide carrier tape: 4,000 parts per 13" reel.

Order as: 8806-0-58-XX-47-XX-40-0

Mill-Max Part Number	Shell Plating	Contact Plating	RoHS Compliant
----------------------------	---------------	-----------------	-------------------

8806-0-58-80-47-27-40-0

 $200 - 300 \mu$ " Tin (matte finish) over Nickel

30 μ" Gold over Nickel



#### **CONTACT:**

Contact Used: #47, Standard 6 Finger Contact

Current Rating = 4.5 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†: 96% of stress remains after 1,000 hours @ 100 °C; 70% of stress remains after
- 1,000 hours @ 200 °C



The insertion/extraction/normal force characteristics above were derived using a 30 microinch gold plated contact and polished steel gauge pins having a bullet-shaped tip.

The curves represent typical average values. The charts only guide you in selecting a clip that is close to your specification. Your results may vary, so for your specification, we encourage you to obtain complimentary samples for your evaluation.

†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.

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

### **SHELL MATERIAL:**

BRASS ALLOY (UNS C36000) per ASTM B 16

## **Properties of BRASS ALLOY:**

• Chemical composition: Cu 61.5%, Zn 35.4%, Pb 3.1%†
• 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.