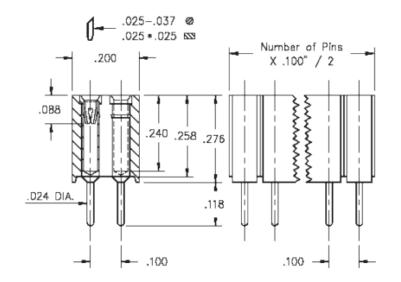
# **DATA SHEET**

Product Number: 803-93-100-10-001000



## **Description:**

Interconnect Socket .100 Grid; Straight Socket Standard Solder Tail (0.118 Tail) Double Row Through Hole Accepts .025-.037 .025 sq post Leads

Plating Code:

93

**Shell Plating:** 

200 μ" Tin/Lead(93/7) over 100 μ" Nickel

Inner Contact Plating: 30 μ" Gold over 50 μ" Nickel

# Of Pins	Mill-Max Part Number	RoHS Compliant
100	803-93-100-10-001000	NO

#### **CONTACT:**

Contact Used: #47, Standard 6 Finger Contact

**Current Rating = 4.5 Amps** 

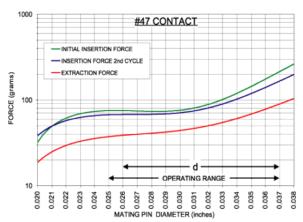
BERYLLIUM COPPER ALLOY 172 (UNS C17200) per ASTM B 194

## **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.

#### LOOSE PIN:

Pin Used: 1304 (Brass Alloy)

## 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.

#### **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.