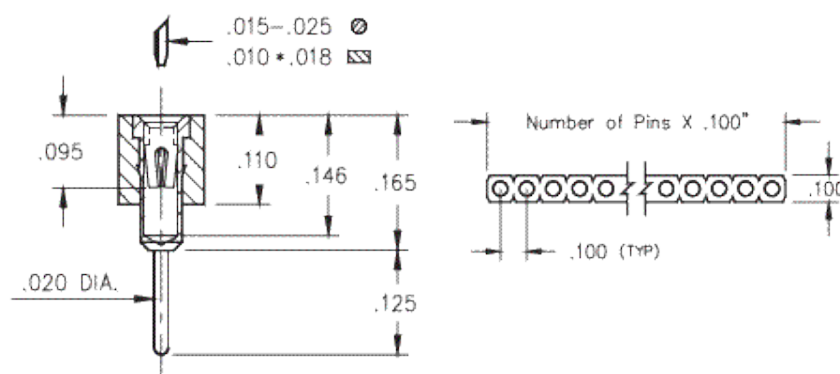


**Product Number: 310-13-120-41-001000**



**Description:**

Interconnect Socket  
 .100 Grid; Straight Socket  
 Standard Solder Tail (0.125 Tail)  
 Single Row  
 Through Hole  
 Accepts .015-.025" Leads

**Plating Code:**


13

**Shell Plating:**

10  $\mu$ " Gold over 100  $\mu$ " Nickel

**Inner Contact Plating:**

30  $\mu$ " Gold over 50  $\mu$ " Nickel

# Of Pins	Mill-Max Part Number	RoHS Compliant
20	310-13-120-41-001000	

**CONTACT:**

Contact Used: #30, Standard 4 Finger Contact

**Current Rating = 3 Amps**

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

**Properties of BERYLLIUM COPPER:**

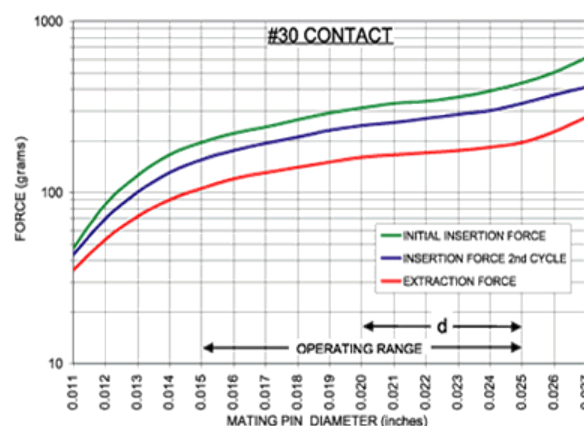
- Chemical composition: Cu 98.1%, Be 1.9%
- Temper as stamped: TD01

Properties after heat treatment (TH01):

- Hardness: 36-43 Rockwell C
- Mechanical Life: 100 Cycles Min.
- Density: .298 lbs/in<sup>3</sup>
- 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

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

†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.



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.

**LOOSE PIN:**

Pin Used: 1001 (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/in<sup>3</sup>
- 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.