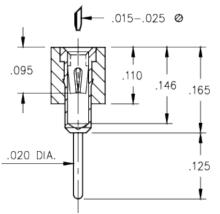
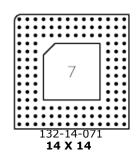


# **DATA SHEET**

# Product Number: 510-13-132-14-071002





# **Description:** PGA Socket

Standard Solder Tail Through Hole Accepts .015-.025" Leads

Plating Code: 13

**Shell Plating:** 

10  $\mu$ " Gold over 100  $\mu$ " Nickel Inner Contact Plating:

30 μ" Gold over 50 μ" Nickel

Mill-Max
Part
Number

RoHS Compliant

132

510-13-132-14-071002



#### **CONTACT:**

Contact Used: #35, Lite Force 6 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†: 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.

#### LOOSE PIN:

Pin Used: 1001 (Brass Alloy)

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

# 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)

 $\pm$ (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  $446^{\circ}F$  (230°C) are considered suitable for "eutectic" reflow soldering, above  $500^{\circ}F$  (260°C) for "lead-free" reflow soldering.