DATA SHEET



### Product Number: 694-43-632-00-670000



## 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: 0552 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:**