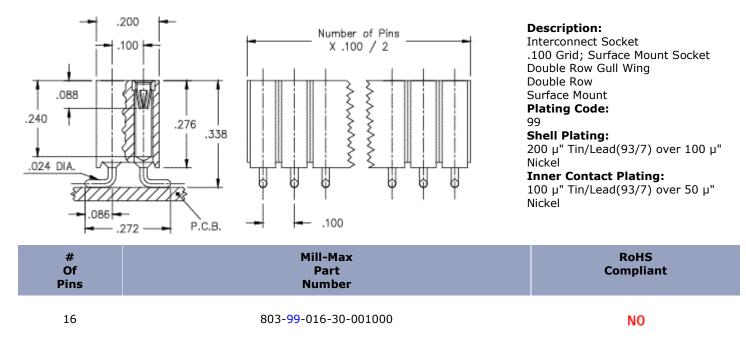
DATA SHEET



# Product Number: 803-99-016-30-001000



1000

FORCE (grams)

100

10 + 07 0:050 #47 CONTACT

d

OPERATING RANGE

0.035 0.036 0.037 0.038

INITIAL INSERTION FORCE

0.023

0.024

0.022

0.021

0.025 0.026 0.028

0.029

MATING PIN DIAMETER (inches)

0.030 0.031 0.032 0.033 0.033

0.027

-INSERTION FORCE 2nd CYCLE -EXTRACTION FORCE

## 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<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.

#### **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.