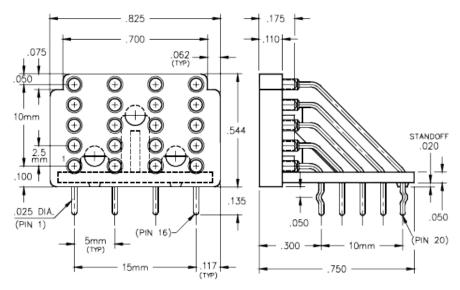
# **DATA SHEET**

#### Product Number: 594-99-020-01-007032



Description:
DIP Display Socket
20 Position
Horizontal Mount
Through Hole
Accepts .015-.025" Leads
Plating Code:
99

Shell Plating:

200  $\mu$ " Tin/Lead(93/7) over 100  $\mu$ " Nickel

Inner Contact Plating:

100  $\mu$ " Tin/Lead(93/7) over 50  $\mu$ " Nickel

# Of Pins	Mill-Max Part Number	RoHS Compliant
20	594-99-020-01-007032	NO

#### **CONTACT:**

Contact Used: #30, Standard 4 Finger Contact

**Current Rating =** 3 Amps

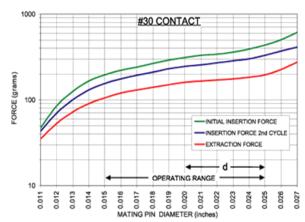
**BERYLLIUM COPPER ALLOY** 172 (UNS C17200) per ASTM B 194

# **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/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: 8857 (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)

 $\dagger$ (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:**

**NYLON 46** (Stanyl TE250F6 {30% glass} or TE250F9 {45% glass}, black)

High Temperature

# **Properties of NYLON 46:**

• Brand: Stanyl

• Grade: TE250-F6 or F9

• Material Heat Deflection Temp. (per ASTM D 648): 554°F (290°C) @ 264 psi

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