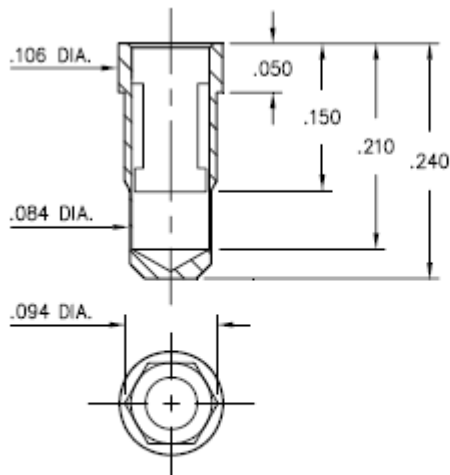




# DATA SHEET

**Product Number: 0342-0-15-15-42-27-10-0**



**0342-0-15-XX-42-XX-10-0**

Hex press-fit in .090±.002  
plated thru hole

## Description:

**0342** - Receptacle With No Tail  
Accepts .059-.063 diameter leads.

## Packaging:

Packaged in Bulk

Mill-Max Part Number	Shell Plating	Contact Plating	RoHS Compliant
0342-0-15-15-42-27-10-0	10 µ" Gold over Nickel	30 µ" Gold over Nickel	

## CONTACT:

Contact Used: #42, Power Contact

**Current Rating** = 50 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.

## Mechanical Data #42 Contact:

Insertion/Extraction Force with a Ø.061 (nominal) pin:

First Cycle		2nd & Subsequent Cycles	
Insertion Force	Extraction Force	Insertion Force	Extraction Force
20N	6N	10N	6N

**SHELL MATERIAL:**

**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.