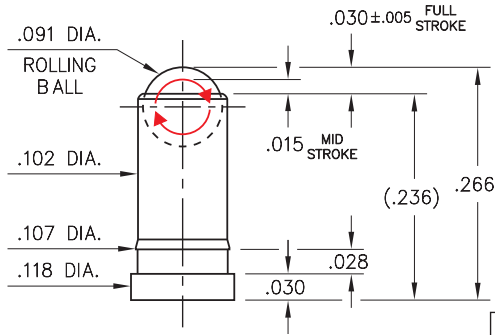


**PRODUCT NUMBER: 0945-0-15-20-09-14-11-0**

**0945-0-15-20-09-14-11-0**  
 Omniball® Spring-Loaded Pin  
 For lateral, sliding & rolling contact applications  
 Surface mount on .128" Dia. min. solder pad



Standard Tolerances:  
 Lengths: ±.006  
 Diameters: ±.002  
 Angles: ±2°

**DESCRIPTION**

Spring-Loaded Pin with No Tail

**Durability:**

100,000 to 1,000,000 Cycles

**Current Rating:**

3.5A continuous, 5A peak

**Contact Resistance:**

20 mΩ Max

**Operating Temperature Range:**

-55/+125° C (discontinuous)

**Vibration:**

No Elect. Discontinuity > 1μs @ 0-200 Hz, 10g

**Shock:**

No Elect. Discontinuity > 1μs @ 50g

**Mounting Feature:**

Surface Mount

**Packaging:** 15 - Packaged in Bulk

<b>Shell Plating</b>	<b>Contact Plating</b>	<b>ROHS</b>
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20 μ" Gold over Nickel

10 μ" Gold over Nickel

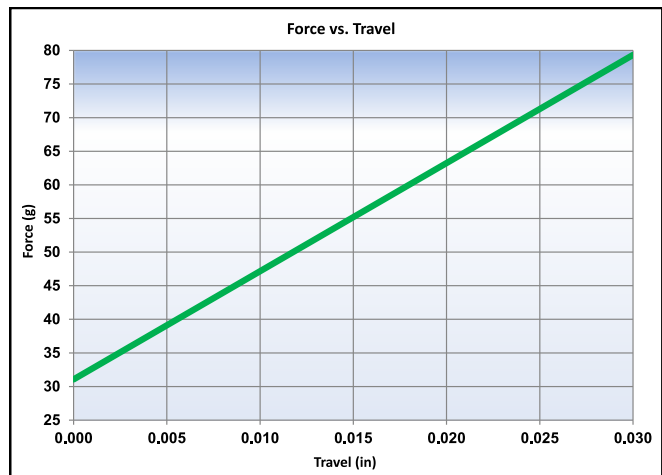


**CONTACT:**

**#09 SPRING**

**STANDARD FORCE SPRING: 55 GRAMS FORCE @ MID STROKE; .030" FULL STROKE**

Spring Material : <b>Beryllium Copper Alloy 172</b>
Mid. Stroke : <b>.015" [0,38]</b>
Full Stroke Capability : <b>.030" ± .005" [0,76 ± 0,127]</b>
Force @ Mid. Stroke : <b>55 g ± 10 g</b>
Initial Force (Pre-Load) : <b>30 g</b>



Stroke & force values are measured using spring pins with an internal construction per the design specification.  
 Individual spring pin performance may vary from these values based on design differences.

<b>Material</b>	Beryllium Copper	<b>Grams Force</b>	55
<b>Max Stroke</b>	0.03		

## CONTACT MATERIAL:

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

Properties of BERYLLIUM COPPER:

- Chemical composition: Cu 98.1%, Be 1.9%
- Hardness: 36-43 Rockwell C
- Density: .298 lbs/in<sup>3</sup>
- Electrical Conductivity: 22% IACS\*
- Resistance: 10 mΩ 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 other materials. [Contact Tech Support](#) for more info.

## ADDITIONAL NOTES & SPECIFICATIONS

In the interest of improved design, quality and performance, Mill-Max reserves the right to make changes in its specifications without prior notice. Specifications and tolerances are provided wherever possible. Due to the wide variety of interconnects Mill-Max offers, the specific tolerances vary from product to product. If you need information regarding the tolerance of a particular part, please contact Technical Services.

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