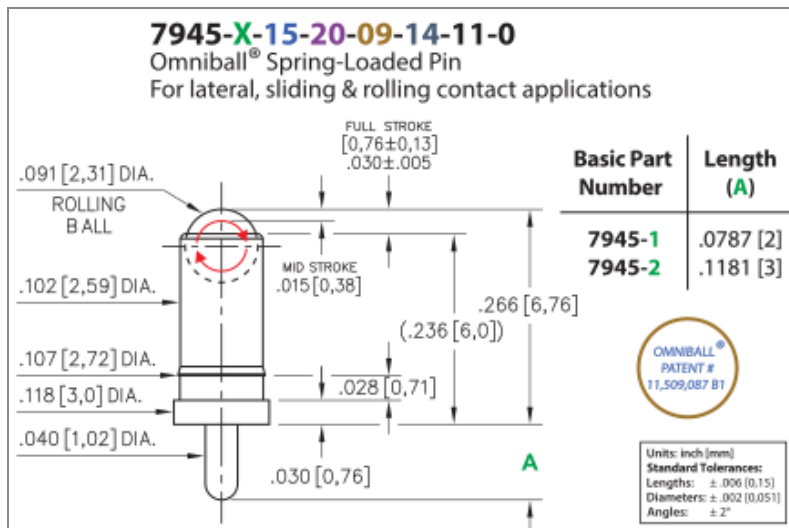




PRODUCT NUMBER: 7945-1-15-20-09-14-11-0

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DATA SHEET



## 7945-1-15-20-09-14-11-0 SPECIFICATIONS

| General Info                     |                                        |
|----------------------------------|----------------------------------------|
| Description <sup>1</sup> :       | Spring-Loaded Pin with a Standard Tail |
| Plunger Type:                    | OmniBall®                              |
| Mounting Feature <sup>2</sup> :  | Through-Hole Solder Mount              |
| Mounting Hole:                   | .044" (1,118mm)                        |
| Initial Height:                  | .266" (6,756mm)                        |
| Stroke:                          | .030" (0,762mm)                        |
| Packaging:                       | Packaged in Bulk                       |
| RoHS <sup>3</sup> :              | Yes                                    |
| Product Lifecycle <sup>4</sup> : | Active                                 |
| Country Of Origin:               | USA                                    |

| Materials                                            |
|------------------------------------------------------|
| Shell Material <sup>5</sup> : Brass Alloy            |
| Shell Plating <sup>6</sup> : 20 μ" Gold over Nickel  |
| Spring Plating <sup>7</sup> : 10 μ" Gold over Nickel |

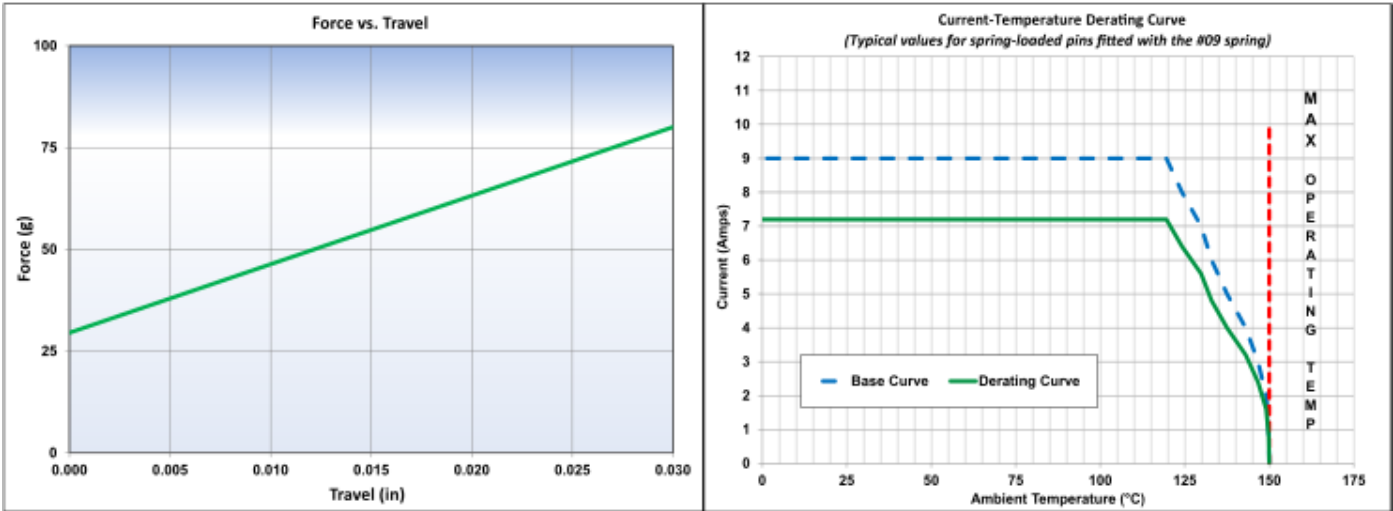
| Technical Specs                            |                                                       |
|--------------------------------------------|-------------------------------------------------------|
| Mechanical life (Durability):              | 100,000 to 1,000,000 Cycles @ Mid-Stroke              |
| Operating Temperature Range <sup>8</sup> : | -55/+125° C                                           |
| Maximum Current:                           | 9A @ 30° C Temp. Rise                                 |
| Maximum Derated Current:                   | 7.2A                                                  |
| Contact Resistance:                        | 30 m $\Omega$ Max                                     |
| Shock <sup>9</sup> :                       | No Elect. Discontinuity > 1 $\mu$ s @ 50g             |
| Vibration <sup>10</sup> :                  | No Elect. Discontinuity > 1 $\mu$ s @ 10-2000HZ, 20 G |

NOTES:

- 1. Standard Tolerances:  
Lengths +/- .006" (0,15)  
Diameters: +/- .002" (0,051)  
Angles: +/- 2°
- 2. For through-hole solder mounting of this part, the suggestion is to make the finished hole size, at its minimum, .004" larger than the diameter being soldered into the mounting hole.
- 3. Mill-Max products labeled with the RoHS symbol are compliant with all three ROHS Directives. All of our products previously described as RoHS (2002/95/EC) and RoHS-2 (2011/65/EC) are also compliant with RoHS-3 (2015/863/EU).
- 4. Part is Active and in Production, No Scheduled Obsolescence
- 5. Brass Alloy 360 per ASTM B 16, or 385 per ASTM B455
- 6. GOLD per ASTM B 488, Type 1 (99.7% min. gold), Code C (130-200 HK {Knoop hardness}); NICKEL per ASTM B 689, Type 2 (Bright)
- 7. GOLD per ASTM B 488, Type 1 (99.7% min. gold), Code C (130-200 HK {Knoop hardness}); NICKEL per ASTM B 689, Type 2 (Bright)
- 8. Storage per IEC 60512-11-(4,9,10,12) and peak operating temperature per IEC 60512-5-2, Test 5b
- 9. Per IEC 60512-6-3: Test 6c: Shock
- 10. Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)

SPRING:

|                                              |                                                      |
|----------------------------------------------|------------------------------------------------------|
| #09 SPRING STANDARD FORCE SPRING             | Full Stroke Capability : .030"± .005" [0,76 ± 0,127] |
| Spring Material : Beryllium Copper Alloy 172 | Force @ Mid. Stroke : 55 g ± 10 g                    |
| Mid. Stroke : .015" [0,38]                   | Initial Force (Pre-Load) : 30 g                      |



The stroke, force and current rating 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.

|            |                  |                 |                       |
|------------|------------------|-----------------|-----------------------|
| Material   | Beryllium Copper | Grams Force     | 55g                   |
| Max Stroke | .030" (0,762mm)  | Maximum Current | 9A @ 30° C Temp. Rise |

|                                      |             |                              |       |
|--------------------------------------|-------------|------------------------------|-------|
| Maximum Operating Temp @ Max Current | 120.00° C   | 20% De-rated Maximum Current | 7.20A |
| Contact Resistance                   | 30.00mΩ Max |                              |       |

ADDITIONAL NOTES AND 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. The tolerance on dimensions of critical to function features is typically held tighter than the stated standard tolerances, such as press-fits, holes and lengths affecting the coplanarity of SMT products. 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.

RELATED LINKS AND DOCUMENTS

- Engineering Notebook: [Introduction to Spring Loaded Pogo Pins & Connectors](#)
- Environmental Compliance: <https://www.mill-max.com/rohs>