



PRODUCT NUMBER: 0945-1-15-20-06-14-11-0

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DATA SHEET

0945-X-15-20-0X-14-11-0
Omnibal[®] Spring-Loaded Pin
 For lateral, sliding & rolling contact applications

OMNIBALL[®]
 PATENT #
 11,509,087 B1

Basic Part Number	Base Dia. (C)	Length (L)
0945-0	.118" [3.00]	.266" [6.76]
0945-1	.122" [3.10]	.218" [5.54]

See following slides for full dimensions and information

Units: inch (mm)
 Standard Tolerances:
 Lengths: ±.006 [0.152]
 Diameters: ±.002 [0.051]
 Angles: ±2°



0945-1-15-20-06-14-11-0 SPECIFICATIONS

General Info	
Description¹:	Surface Mount Spring-Loaded Pin
Plunger Type:	Omnibal [®]
Mounting Feature:	Surface Mount
Initial Height:	.266" (6,756mm)
Stroke:	.030" (0,762mm)
Packaging:	Packaged in Bulk
RoHS²:	Yes
Product Lifecycle³:	Active

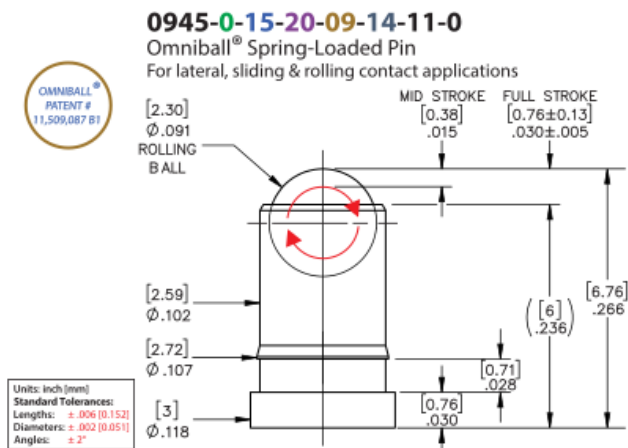
Materials
Shell Material⁴: Brass Alloy
Shell Plating⁵: 20 μ" Gold over Nickel
Spring Plating⁶: 10 μ" Gold over Nickel

Technical Specs	
Durability:	100,000 to 1,000,000 Cycles @ Mid-Stroke
Operating Temperature Range⁷:	-55/+125° C
Current Rating⁸:	See Spring Specifications Below
Contact Resistance⁹:	See Spring Specifications Below
Shock¹⁰:	No Elect. Discontinuity > 1μs @ 50g
Vibration¹¹:	No Elect. Discontinuity > 1μs @ 10-2000HZ, 20 G

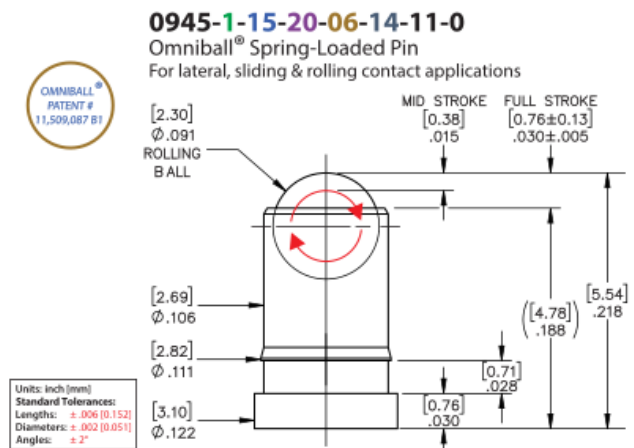
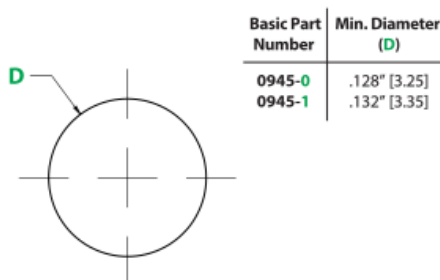
NOTES:

- Standard Tolerances:
Lengths +/- .006" (0,15)
Diameters: +/- .002" (0,051)
Angles: +/- 2°
- 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).
- Part is Active and in Production, No Scheduled Obsolescence
- Brass Alloy 360 per ASTM B 16, or 385 per ASTM B455
- 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)
- 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)
- Storage per IEC 60512-11-(4,9,10,12) and peak operating temperature per IEC 60512-5-2, Test 5b
- Per IEC 60512-5-2; Current Carrying Capacity; Current Derating
- Per EIA-364-23C: Low Level Contact Resistance.
- Per IEC 60512-6-3: Test 6c: Shock
- Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)

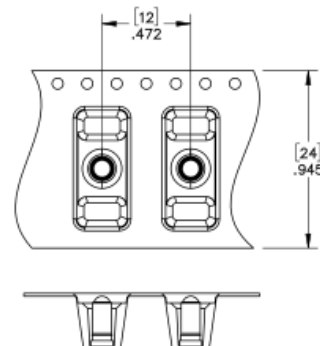
ADDITIONAL PARTS, PACKAGING, & ASSEMBLY INFO



Suggested P.C.B. Footprint

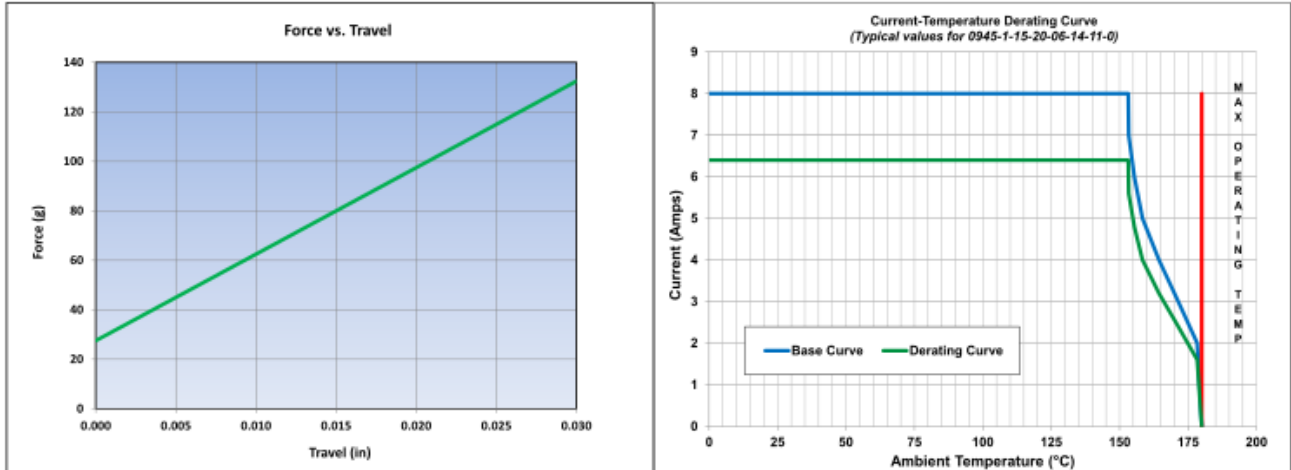


0945-0-57 Tape & Reel Details



SPRING:

#06 SPRING STANDARD FORCE SPRING	Full Stroke Capability : .030"± .005" [0,76 ± 0,127]
Spring Material : Stainless Steel 302	Force @ Mid. Stroke : 80 g ± 20 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	Stainless Steel	Grams Force	80.0000g
Max Stroke	0.03	Maximum Current	8A @ 30° C Temp. Rise
Maximum Operating Temp @ Max Current	150.00° C	20% De-rated Maximum Current	6.40A
Contact Resistance	20.00mΩ 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: (<https://www.mill-max.com/engineering-notebooks/spring-loaded-pogo-pins-connectors>)

Environmental Compliance: (<https://www.mill-max.com/rohs>)