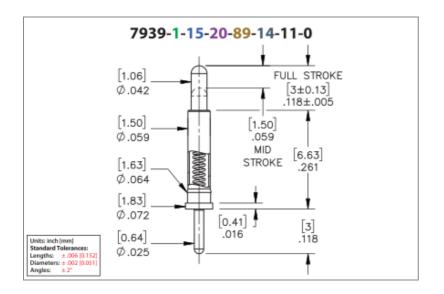


PRODUCT NUMBER: 7939-1-15-20-89-14-11-0

www.mill-max.com
DATA SHEET





7939-1-15-20-89-14-11-0 SPECIFICATIONS

General Info		
Description ¹ :	Spring-Loaded Pin with a Standard Tail	
Plunger Type:	Round	
Mounting Feature ² :	Through-Hole Solder Mount	
Mounting Hole:	.029" (0,737mm)	
Alternate Mounting Hole:	N/A	
Inital Height:	.379" (9,627mm)	
Stroke:	.118" (2,997mm)	
Packaging:	Packaged in Bulk	
RoHS ³ :	Yes	
Product Lifecycle ⁴ :	Active	
Country Of Origin:	USA	

FI	CATIONS				
	Materials				
Shell Material ⁵ :Brass Alloy					
	Shell Plating ⁶ : 20 µ" Gold over Nickel				
	Spring Plating 7 : 10 μ Gold over Nickel				

Technical Specs				
Mechanical life (Durability):	100,000 to 1,000,000 Cycles @ Mid-Stroke			
Operating Temperature Range ⁸ :	-55/+125° C			
Maximum Current:	11A @ 30° C Temp. Rise			
Maximum Derated Current:	8.8A			
Contact Resistance:	20 mΩ Max			
Shock ⁹ :	No Elect. Discontinuity > 1μs @ 50g			
Vibration ¹⁰ :	No Elect. Discontinuity > 1μs @ 10-2000HZ, 20 G			

NOTES:

1. Standard Tolerances:

Lengths +/-.006" (0,15)

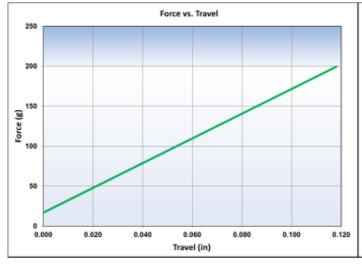
Diameters: +/-.002" (0,051)

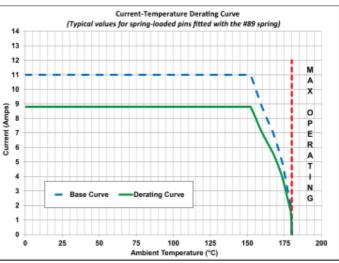
Angles: +/- 2°

- 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.
- 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:

#89 SPRING HIGH FORCE SPRING	Full Stroke Capability: .118"± .005" [3,0 ± 0,127]	
Spring Material: Stainless Steel 302	Force @ Mid. Stroke: 100 g ± 20 g	
Mid. Stroke: .059" [1,5]	Initial Force (Pre-Load): 25 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	100g
Max Stroke	.118" (2,997mm)	Maximum Current	11A @ 30° C Temp. Rise

Maximum Operating Temp @ Max Current	150.00° C	20% De-rated Maximum Current	8.80A
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: Introduction to Spring Loaded Pogo Pins & Connectors
- Environmental Compliance: https://www.mill-max.com/rohs