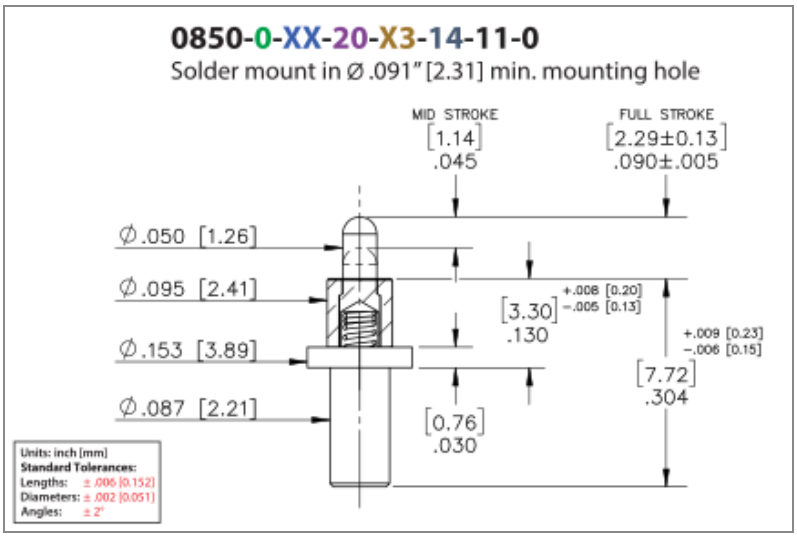
PRODUCT NUMBER: 0850-0-57-20-83-14-11-0

www.mill-max.com
DATA SHEET





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190 Pine Hollow Road, Oyster Bay, NY 11771

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0850-0-57-20-83-14-11-0 SPECIFICATIONS

General Info	
Description[1]:	Through Hole Mount Spring-Loaded Pin
Plunger Type:	Round
Mounting Feature[2]:	Through-Hole Solder Mount
Mounting Hole:	.091" (2,311mm)
Alternate Mounting Hole:	N/A
Inital Height:	.220" (5,588mm)
Stroke:	.090" (2,286mm)
Packaging:	Vertically on Tape & Reel
RoHS[3]:	Yes
Product Lifecycle[4]:	Active
Country Of Origin:	USA

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:	Inner Spring Dependent, see Spring Data Below
Maximum Derated Current:	Inner Spring Dependent, see Spring Data Below
Contact Resistance:	Inner Spring Dependent, see Spring Data Below
Shock[9]:	No Elect. Discontinuity > 1µs @ 50g
Vibration[10]:	No Elect. Discontinuity > 1µs @ 10-2000HZ, 20 G

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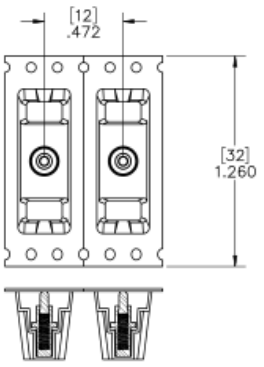
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NOTES:

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)

ADDITIONAL PARTS, PACKAGING, & ASSEMBLY INFO

0850-0-57 Tape & Reel Details

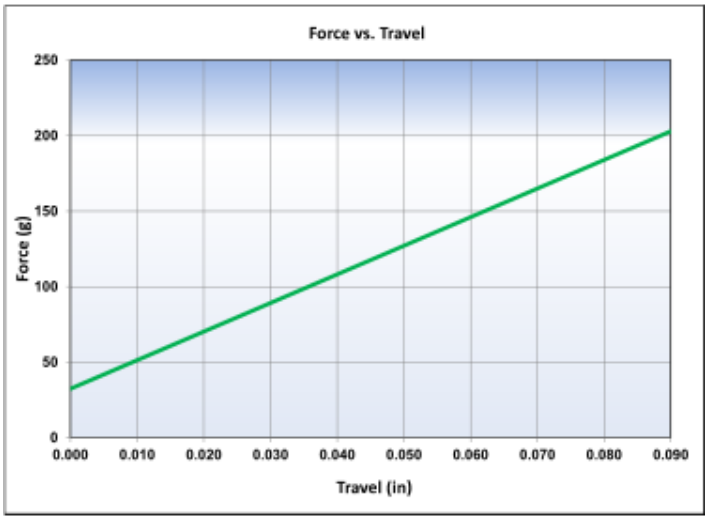


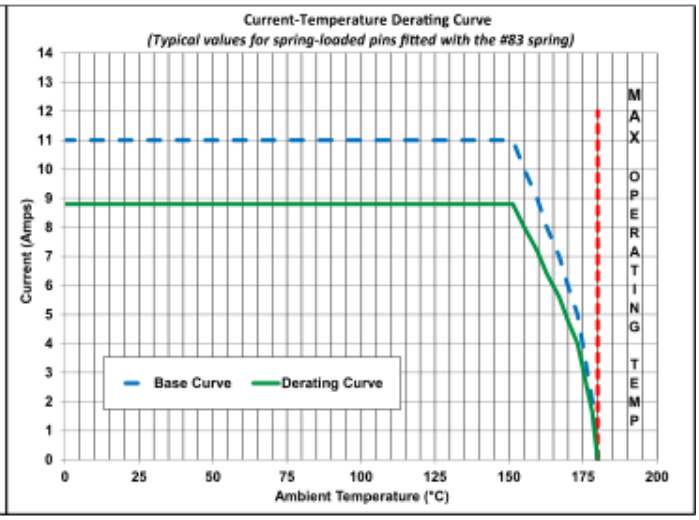
SPRING:

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#83 SPRING HIGH FORCE SPRING	Full Stroke Capability : .090"± .005" [2,29 ± 0,127]
Spring Material : Stainless Steel 302	Force @ Mid. Stroke : 120 g ± 20 g
Mid. Stroke : .045" [1,14]	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**	120g
Max Stroke	.090" (2,286mm)	**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

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