PRODUCT NUMBER: 811-22-020-30-002101

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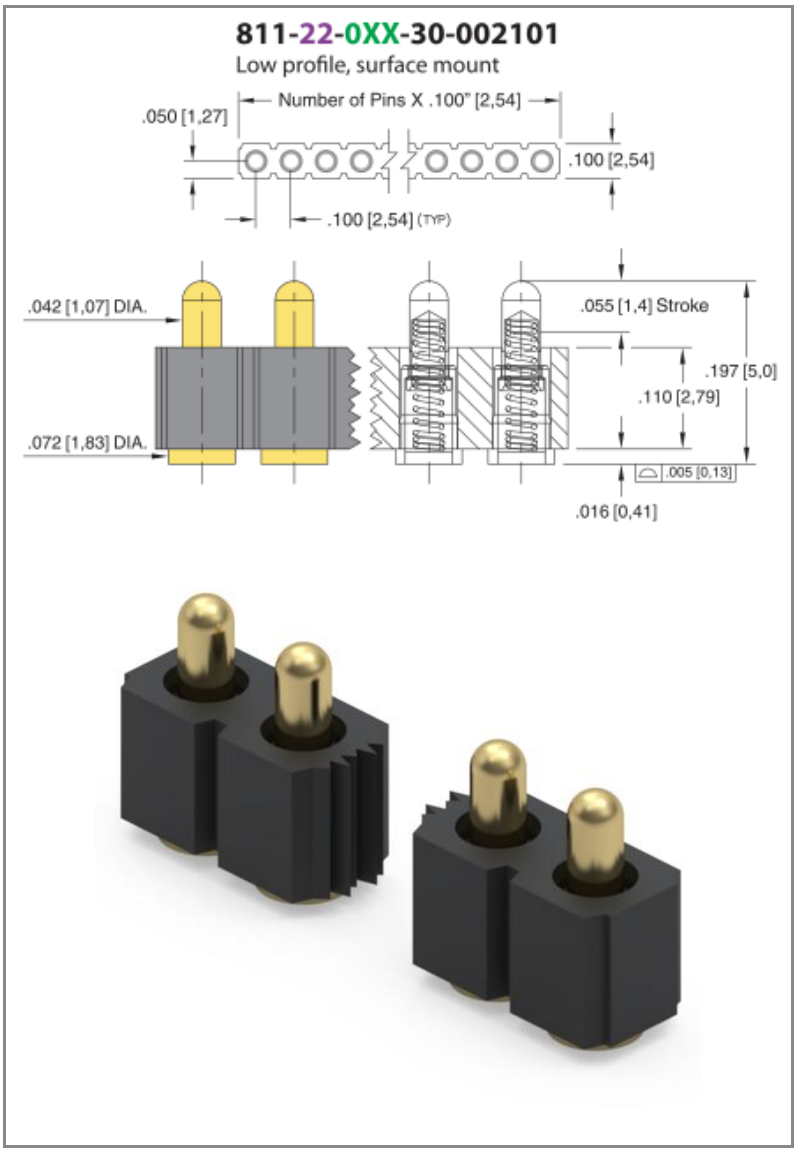
DATA SHEET



General Info	
Description[1]:	PCB Mount Spring-Loaded Header Vertical Surface Mount
Plunger Type:	Round
Type:	Spring-Loaded
Category:	Pogo Pin Header Strip
Mounting Style:	Surface Mount
# Pins:	20
Packaging[2]:	Packaged in Box or Tube
Rows:	Single Row
ECCN:	Contact Factory
HTSUS:	8536.90.4040
Product Lifecycle:	Active
Country Of Origin:	USA

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811-22-020-30-002101- SPECIFICATIONS

Environmental Specs	
Temperature Range[3]:	-55/+125° C
Shock[4]:	No Elect. Discontinuity > 1µs @ 50g
Vibration[5]:	No Elect. Discontinuity > 1µs @ 10-2000HZ, 15 G
RoHS[6]:	Yes
Moisture Sensitivity Level (MSL):	1 (Unlimited)
REACH Status:	REACH Unaffected

Mechanical Specs	
Mechanical life (Durability):	100,000 to 1,000,000 Cycles @ Mid-Stroke

Materials	
Loose Pin/Receptacle #(Material):	0900 (Brass Alloy)
Shell Plating:	20µ" Gold over Nickel
Inner Spring #:	75
Inner Spring Material:	Beryllium Copper
Inner Spring Plating:	(Spring) 10µ" Gold
Insulator Material:	Nylon 4/6

Technical Specs	
Initial Height:	.197" (5,004mm)
Stroke:	.055" (1,397mm)
Pitch:	.100" (2,540mm)
SMT Pad Size:	.082" (2,083mm)

Electrical Specs	
Rated Voltage:	100 VRMS/150 VDC
Insulation Resistance:	10,000 MΩ min.
Dielectric Withstanding Voltage:	1,000 VRMS min.

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NOTES:

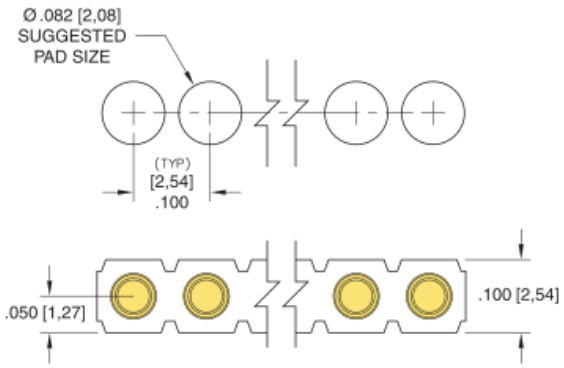
1. **Standard Tolerances**
   Assembly tolerance: +/-.010" (.25mm)
   Connector Length "L"

Connector Length "L"	Tolerance
L ≤ 2" (L ≤ 50.8 mm)	+/- .005" (+/- .127 mm)
2< L ≤ 3" (50.8 < L ≤ 76.2 mm)	+ .007/ - .006" (+ .178/ -.152 mm)
3< L ≤ 4" (76.2 < L ≤ 101.6 mm)	+ .009 / - .007" (+ .229 / - .178 mm)
4< L ≤ 5" (101.6 < L ≤ 127 mm)	+ .011 / - .008" (+ .279 / - .203 mm)
5< L ≤ 6.4" (127 < L ≤ 162.56 mm)	+ .013 / - .009" (+ .330 / - .229 mm)

   Insulator width: +/-.005 (.13mm)
   Insulator height: +/-.005 (.13mm)
   Co-planarity of SMT connectors: .005" (.13mm) up to 1" (25.4mm) in connector length
   Insulator Flatness: .005" (.13mm) up to 1" (25.4mm) in connector length
   Pin Length: +/-.006 (.15mm)
   Pin Diameter: +/-.002 (.051mm)
   Pin Angle: +/-2°
2. Not all part numbers in the series may be packaged in tubes. Some specific part numbers may be packaged in a box.
3. Per IEC 60512-11-(4,-9,-10,-12)
4. For discrete pin only. Per IEC 60512-6-3: Test 6c: Shock
5. For discrete pin only. Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)
6. 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).

ADDITIONAL PARTS, PACKAGING, & ASSEMBLY INFO

Suggested P.C.B. Footprint



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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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