



823-22-OXX-10-040101

The technical drawing shows three views of the connector. The top view is a plan view showing a rectangular body with six circular pin sockets arranged in two rows of three. Dimensions include a pitch of $(\# \text{ of Pins} \times .100'' [2.54])/2$, a width of $[2.54] .100$, a height of $[5.08] .200$, and a center-to-center distance between pins of $[2.54] .100$. A dashed line indicates a typical section. The side view shows the profile of the connector with dimensions: total height $[1.06]$, base diameter $\phi .042$, mounting flange diameter $[1.50]$, flange thickness $\phi .059$, main body diameter $[1.83]$, main body length $\phi .072$, pin diameter $[0.43]$, and pin length $\phi .017$. The end view shows the pin arrangement with dimensions: pin diameter $[0.91]$, pin length $\phi .036$, total length $[1.80]$, and pin offset $.071$. A cross-sectional view shows the internal components with dimensions: full stroke $[0.99]$, stroke $.039$, total height $[3.48]$, mounting flange diameter $.137$, main body diameter $[0.41]$, main body length $.016$, pin diameter $[1.75]$, and pin length $.069$.

3D model of the connector showing the black plastic housing and six gold-colored pins.

General Info	
Description ¹ :	PCB Mount Spring-Loaded Header Vertical Mount Through-Hole
Plunger Type:	Flat
Type:	Spring-Loaded
Category:	Pogo Pin Header Strip
Mounting Style:	Through Hole Solder Mount
# Pins:	46
Packaging ² :	Packaged in Box or Tube
Rows:	Double Row
ECCN:	Contact Factory
HTSUS:	8536.90.4040
Product Lifecycle:	Active
Country Of Origin:	USA

823-22-046-10-040101- 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):	2906 (Brass Alloy)
Shell Plating:	20µ" Gold over Nickel
Inner Spring #:	76
Inner Spring Material:	Beryllium Copper
Inner Spring Plating:	(Spring) 10µ" Gold
Insulator Material:	Nylon 4/6

Technical Specs	
Initial Height:	.137" (3,480mm)
Stroke:	.039" (0,991mm)
Pitch:	.100" (2,540mm)

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

NOTES:

1. Standard Tolerances

Assembly tolerance: $\pm .010"$ (.25mm)

Connector Length "L"

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

Insulator width: $\pm .005$ (.13mm)

Insulator height: $\pm .005$ (.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: $\pm .006$ (.15mm)

Pin Diameter: $\pm .002$ (.051mm)

Pin Angle: $\pm 2^\circ$

- Not all part numbers in the series may be packaged in tubes. Some specific part numbers may be packaged in a box.
- Per IEC 60512-11-(4,-9,-10,-12)
- For discrete pin only. Per IEC 60512-6-3: Test 6c: Shock
- For discrete pin only. Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)
- 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 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>