



859-22-0XX-10-001101
Through-hole mount in $\varnothing .048''$ min. mounting holes

Technical drawing of a 4-pin D-sub connector. The drawing includes three views: a top view, a side view, and a front view. Dimensions are provided in inches, with typical values in parentheses. The top view shows a D-shaped connector with four pins. Dimensions include: [2] .0787 (TYP) for the pin pitch, [4] .1575 (TYP) for the pin pitch, [8] .3150 for the pin pitch, [10] .3937 for the pin pitch, [4] .1575 (TYP) for the pin pitch, [5] .1969 (TYP) for the pin pitch, [3.16] .124 for the pin pitch, [6.91] .272 for the pin pitch, [1.26] $\varnothing .050$ for the pin diameter, [0.41] .016 for the pin diameter, [9.60] .378 for the pin diameter, [1.02] $\varnothing .040$ for the pin diameter, [3.18] .125 for the pin diameter, and FULL STROKE [2.29 $\pm$ 0.13] .090 $\pm$.005 for the pin diameter.

3D model of the 4-pin D-sub connector, showing the black plastic housing and the four gold-plated pins.

General Info	
Description ¹ :	PCB Mount Spring-Loaded Header Rugged Vertical Mount Through-Hole
Plunger Type:	Rounded
Type:	Spring-Loaded
Category:	Pogo Pin Header Strip
Mounting Style:	Mounting Tabs Without Threaded Inserts
# Pins:	4
Packaging ² :	Packaged in Box or Tube
Qty Tube:	23
Rows:	Double Row
Product Lifecycle:	Active

859-22-004-10-001101- 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

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

Materials	
Loose Pin/Receptacle #(Material):	0858 (Brass Alloy)
Shell Plating:	20µ" Gold over Nickel
Inner Plating:	(Spring) 10µ" Gold
Insulator Material:	Nylon 4/6

Technical Specs	
Initial Height:	.378" (9,601mm)
Stroke:	.090" (2,286mm)
Pitch:	.158" (4,001mm)

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: +/- .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: +/-0.005 (.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: +/-0.006 (.15mm)

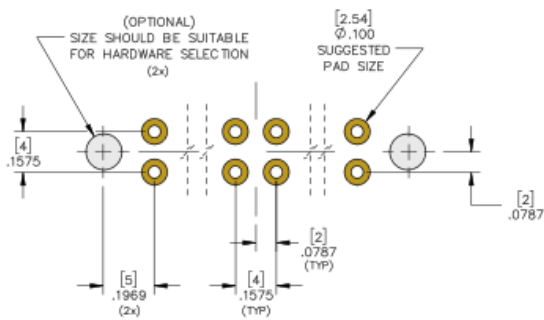
Pin Diameter: +/- .002 (.051mm)

Pin Angle: $\pm 2^\circ$

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



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/introduction-to-spring-loaded-pogo-pins-connectors>)

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