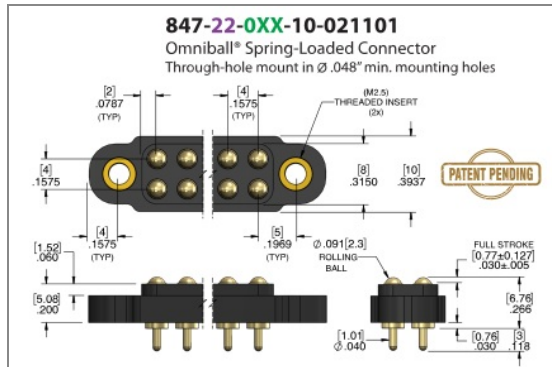




PRODUCT NUMBER: 847-22-010-10-021101

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DATA SHEET



## 847-22-010-10-021101- SPECIFICATIONS

| General Info                    |                                                                      |
|---------------------------------|----------------------------------------------------------------------|
| <b>Description<sup>1</sup>:</b> | PCB Mount Spring-Loaded Header<br>Rugged Vertical Mount Through-Hole |
| <b>Type:</b>                    | Spring-Loaded                                                        |
| <b>Category:</b>                | Omniball® Spring-Loaded Header                                       |
| <b>Mounting Style:</b>          | Mounting Tabs with Metric Threaded Inserts                           |
| <b># Pins:</b>                  | 10                                                                   |
| <b>Pitch:</b>                   | .158" (4,001mm)                                                      |
| <b>Rows:</b>                    | Double Row                                                           |
| <b>Product Lifecycle:</b>       | Active                                                               |

| Environmental Specs                   |                                                    |
|---------------------------------------|----------------------------------------------------|
| <b>Temperature Range<sup>2</sup>:</b> | -55/+125° C                                        |
| <b>Shock<sup>3</sup>:</b>             | No Elect. Discontinuity > 1μs @ 50g                |
| <b>Vibration<sup>3</sup>:</b>         | No Elect. Discontinuity > 1μs @ 10-2000HZ,<br>15 G |
| <b>RoHS<sup>4</sup>:</b>              | Yes                                                |

| Mechanical Specs   |                                          |
|--------------------|------------------------------------------|
| <b>Durability:</b> | 100,000 to 1,000,000 Cycles @ Mid-Stroke |

| Materials                                |                       |
|------------------------------------------|-----------------------|
| <b>Loose Pin/Receptacle #(Material):</b> | 7945 (Brass Alloy)    |
| <b>Shell Plating:</b>                    | 20μ" Gold over Nickel |
| <b>Inner Plating:</b>                    | (Spring) 10μ" Gold    |
| <b>Insulator Material:</b>               | Nylon 4/6             |

| Technical Specs        |                 |
|------------------------|-----------------|
| <b>Initial Height:</b> | .266" (6,756mm) |
| <b>Stroke:</b>         | .030" (0,762mm) |

| Electrical Specs                          |                  |
|-------------------------------------------|------------------|
| <b>Contact Resistance:</b>                | 30 mΩ max.       |
| <b>Rated Voltage:</b>                     | 100 VRMS/150 VDC |
| <b>Insulation Resistance<sup>5</sup>:</b> | 10,000 MΩ min.   |
| <b>Dielectric Strength:</b>               | 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: +/- .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)

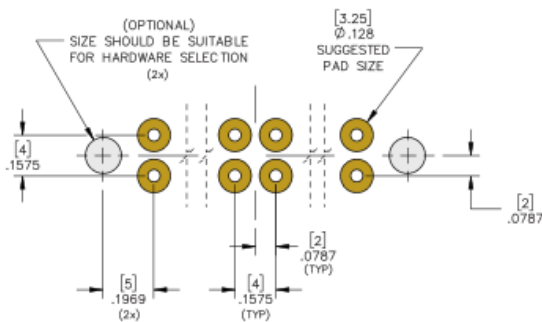
Pin Diameter: +/- .002 (.051mm)

Pin Angle:  $\pm 2^\circ$

2. Per IEC 60512-11-(4,-9,-10,-12)
3. For discrete pin only. Per IEC 60512-6-3: Test 6c: Shock
4. 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).
5. For discrete pin only. Per EIA-364-23C, Low Level Contact Resistance

## 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> )