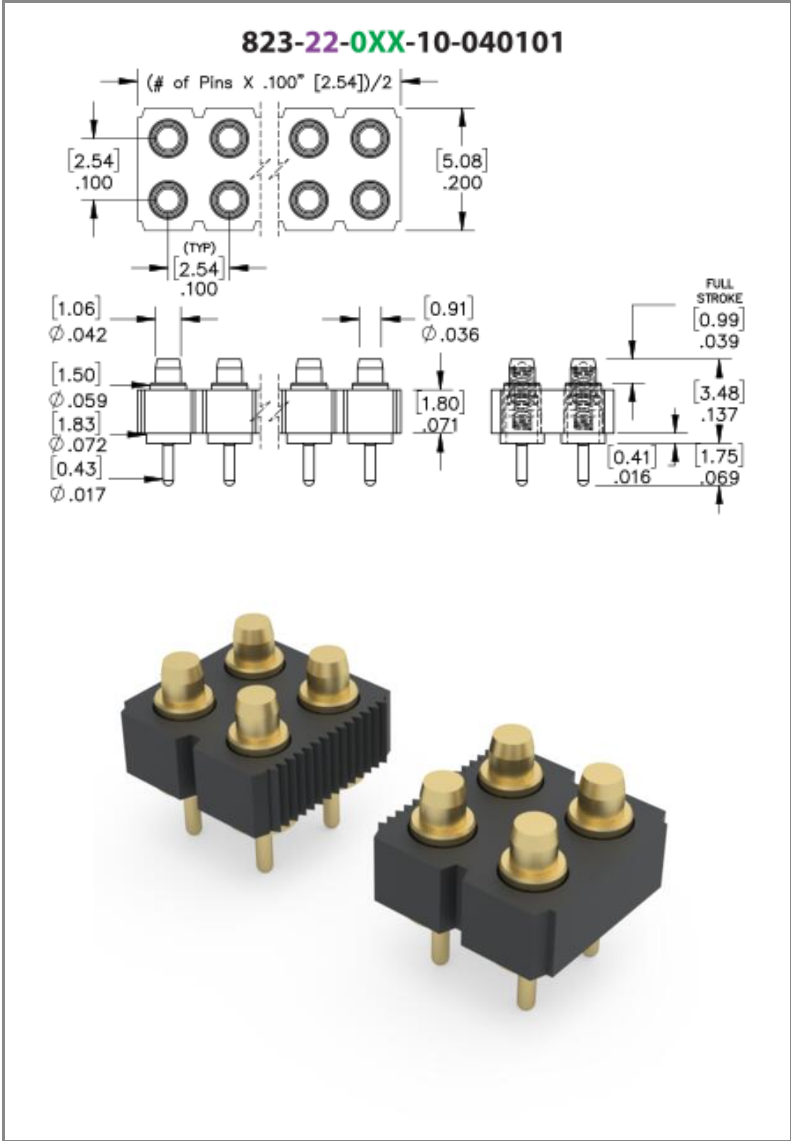




PRODUCT NUMBER: 823-22-042-10-040101

www.mill-max.com  
DATA SHEET



#### General Info

**Description<sup>1</sup>:** 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:** 42

**Packaging<sup>2</sup>:** Packaged in Box or Tube

**Rows:** Double Row

**ECCN:** Contact Factory

**HTSUS:** 8536.90.4040

**Product Lifecycle:** Active

**Country Of Origin:** USA

823-22-042-10-040101- SPECIFICATIONS

| Environmental Specs               |                                                 |
|-----------------------------------|-------------------------------------------------|
| Temperature Range <sup>3</sup> :  | -55/+125° C                                     |
| Shock <sup>4</sup> :              | No Elect. Discontinuity > 1µs @ 50g             |
| Vibration <sup>5</sup> :          | No Elect. Discontinuity > 1µs @ 10-2000HZ, 15 G |
| RoHS <sup>6</sup> :               | 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>