



Technical drawing of a 4-pin connector. The drawing includes a cross-section view on the left and a side view on the right. The cross-section view shows a black plastic housing with four pins. Dimensions include: .025-.037 (pin diameter), .025+.025 (pin diameter), .200 (housing width), .110 (housing thickness), .088 (housing thickness), .146 (pin length), .165 (pin length), .125 (pin length), .022 DIA. (pin diameter), and .160 (pin length). The side view shows the pins with a dimension of .100 (pin length) and a formula for the number of pins:  $\text{Number of Pins} \times .109" / 2$ .

| General Info               |                                                                              |
|----------------------------|------------------------------------------------------------------------------|
| Description <sup>1</sup> : | Standard Solder Tail Socket<br>Accepts .025"-.037" (0,635-0,940mm) dia leads |
| Type:                      | Interconnect                                                                 |
| Category:                  | Machined Pin Socket                                                          |
| Mounting Style:            | Through Hole Solder Mount                                                    |
| Tail Type:                 | Solder Tail                                                                  |
| # Pins:                    | 18                                                                           |
| 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                                                                          |

803-47-018-10-002000- SPECIFICATIONS

| Environmental Specs               |                  |
|-----------------------------------|------------------|
| Temperature Range <sup>3</sup> :  | -55/+125° C      |
| RoHS <sup>4</sup> :               | Yes              |
| Moisture Sensitivity Level (MSL): | 1 (Unlimited)    |
| REACH Status:                     | REACH Unaffected |

| Materials                          |                                              |
|------------------------------------|----------------------------------------------|
| Loose Pin/Receptacle # (Material): | 1303 (Brass Alloy)                           |
| Shell Plating:                     | 200 μ" Tin (matte finish) over 100 μ" Nickel |
| Inner Contact #:                   | 47                                           |
| # Contact Fingers:                 | 6                                            |
| Inner Contact Material:            | Beryllium Copper                             |
| Inner Contact Plating:             | Gold Flash                                   |
| Insulator Material:                | High Temp Thermoplastic                      |

| Technical Specs |                 |
|-----------------|-----------------|
| 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:  $\pm .005$  (.13mm)

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)
- 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 Machined Pin PCB Connectors & Interconnects](#)
- Environmental Compliance: <https://www.mill-max.com/rohs>