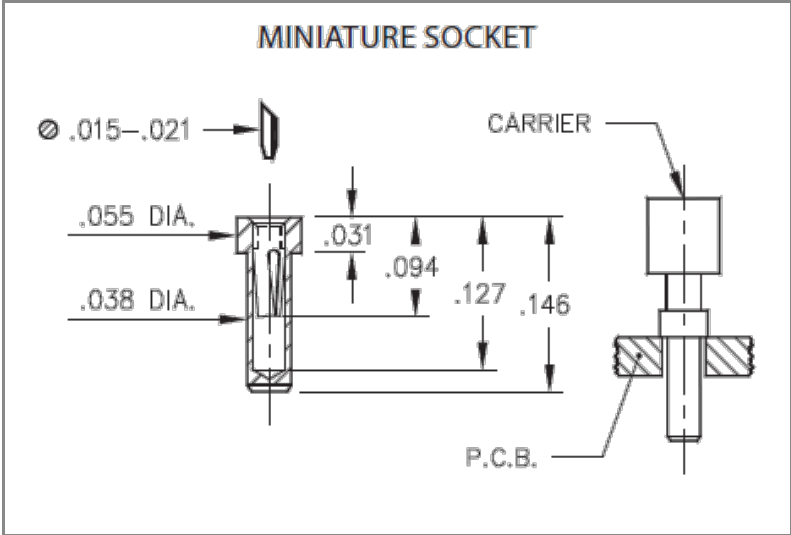




PRODUCT NUMBER: 614-13-089-13-082007

www.mill-max.com  
DATA SHEET



| General Info               |                           |
|----------------------------|---------------------------|
| Description <sup>1</sup> : | Miniature                 |
| Type:                      | PGA                       |
| Category:                  | Pin Grid Array Carrier    |
| Mounting Style:            | Through Hole Solder Mount |
| # Pins:                    | 89                        |
| Packaging <sup>2</sup> :   | Packaged in Box or Tube   |
| ECCN:                      | EAR99                     |
| HTSUS:                     | 8536.90.4040              |

614-13-089-13-082007- SPECIFICATIONS

| Environmental Specs               |                  |
|-----------------------------------|------------------|
| RoHS <sup>3</sup> :               | Yes              |
| Moisture Sensitivity Level (MSL): | 1 (Unlimited)    |
| REACH Status:                     | REACH Unaffected |

| Materials                          |                                         |
|------------------------------------|-----------------------------------------|
| Loose Pin/Receptacle # (Material): | 1407 (Brass Alloy)                      |
| Shell Plating:                     | 10 $\mu$ " Gold over 100 $\mu$ " Nickel |
| Inner Contact #:                   | 21                                      |
| # Contact Fingers:                 | 3                                       |
| Inner Contact Material:            | Beryllium Copper                        |
| Inner Contact Plating:             | 30 $\mu$ " Gold over 50 $\mu$ " Nickel  |
| Insulator Material:                | High Temp Thermoplastic                 |

## NOTES:

1. Standard Tolerances:

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

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

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

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

Pin Length:  $\pm .005$  (.13mm)

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

Pin Angle:  $\pm 2^\circ$

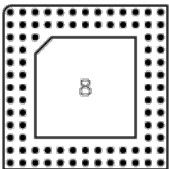
Co-planarity of SMT connectors: .005" (.13mm) up to 1" (25.4mm) in connector length

Insulator Flatness: .005" (.13mm) up to 1" (25.4mm) in connector length

2. Not all part numbers in the series may be packaged in tubes. Some specific part numbers may be packaged in a box.

3. 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



089-13-082

## 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-pin-receptacle-carriers> )

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