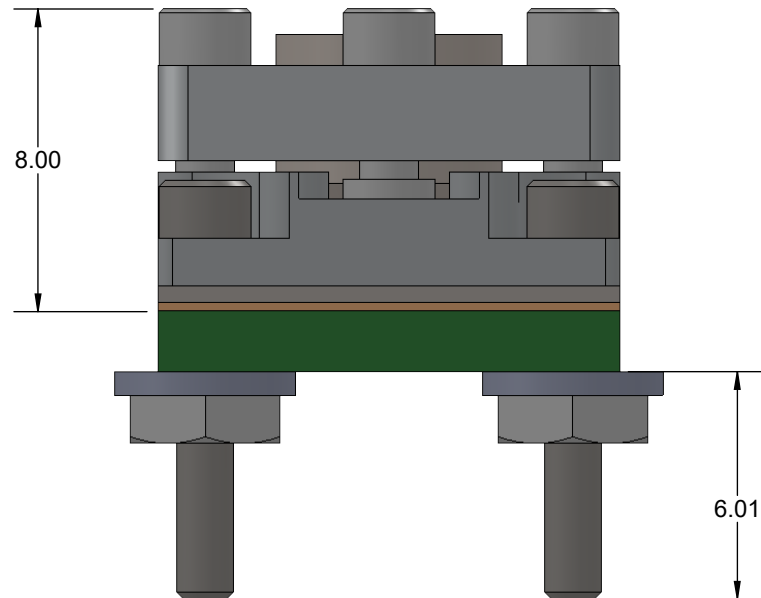
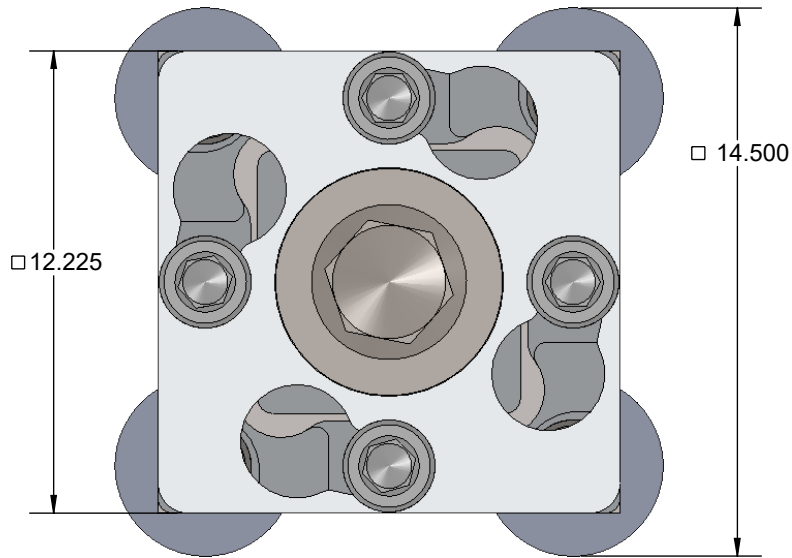


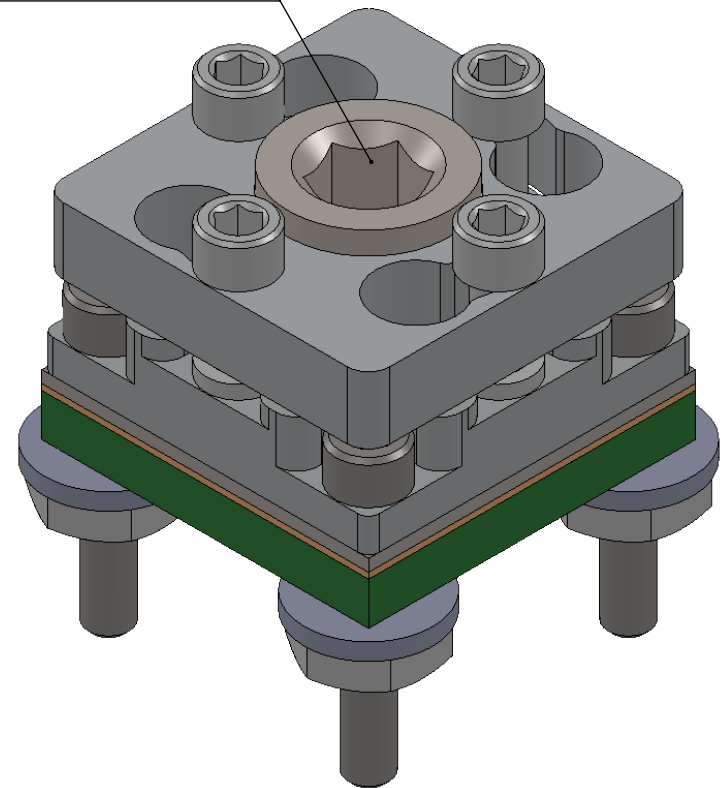
# GHz BGA Socket - Direct mount, solderless



## Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid


Recommended torque = 0.18 in. lbs.  
(3 in. oz.)



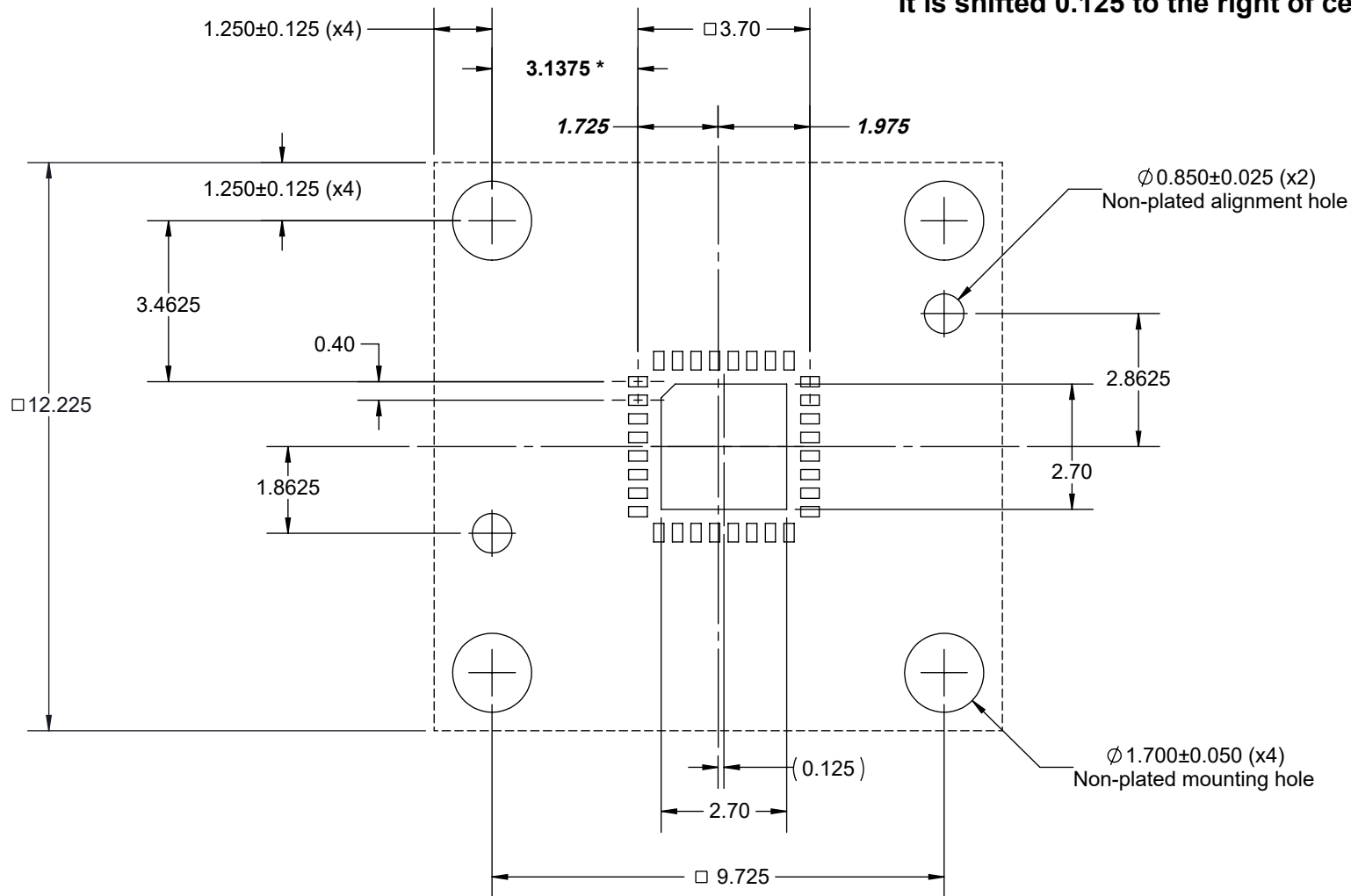
## Description: SG25-QFN, 4MM

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.0254\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.0762\text{mm}$  [ $\pm 0.003"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.127\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

|  |  |   |   |                      |
|--|--|---|---|----------------------|
|  Ironwood Electronics, Inc.<br>Tele: (800) 404-0204<br>www.ironwoodelectronics.com | Material: N/A<br>Finish: N/A<br>Weight: 4.32 | STATUS: Released<br>ENG: S. Faiz<br>FILE: SG25-QFN-2001 Dwg | SHEET: 1 OF 4<br>DRAWN BY: M. Raske<br>DATE: 09/15/2016 | REV. A<br>SCALE: 5:1 |
|  |  |   |   |                      |

**\* Pattern is not centered with respect to mounting holes. It is shifted 0.125 to the right of centerline.**



**Target PCB Recommendations**


- Total thickness: 1.6mm min.
- Plating: Gold or Solder finish
- PCB Pad height: Same or higher than solder mask

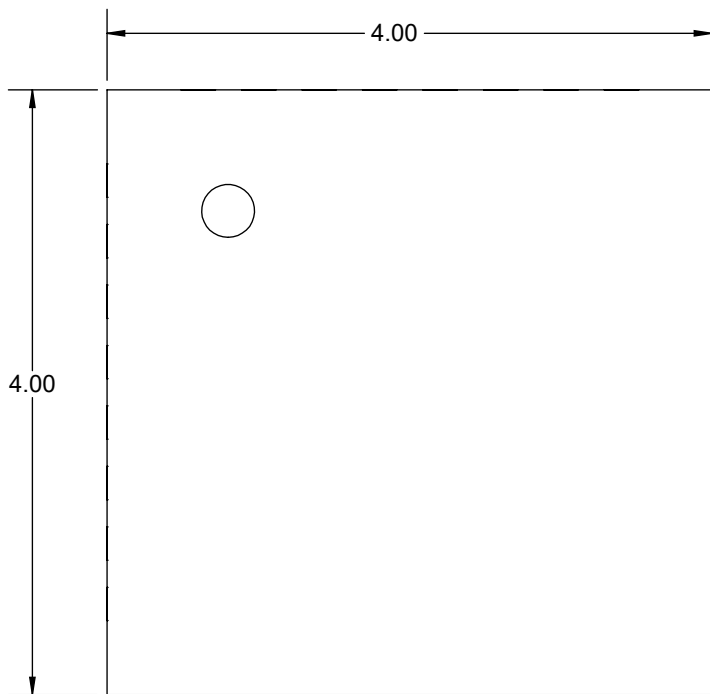
**Description: Recommended PCB Layout**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

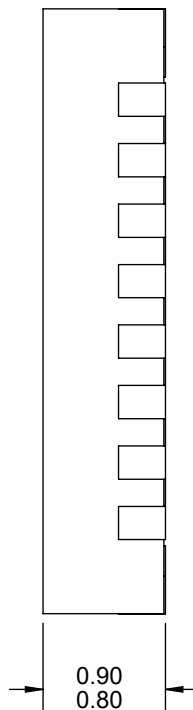
Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001$ "], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001$ "], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005$ "] unless stated otherwise. Materials and specifications are subject to change without notice.

**NOTE: Steel backing plate may be required based on end user's application**

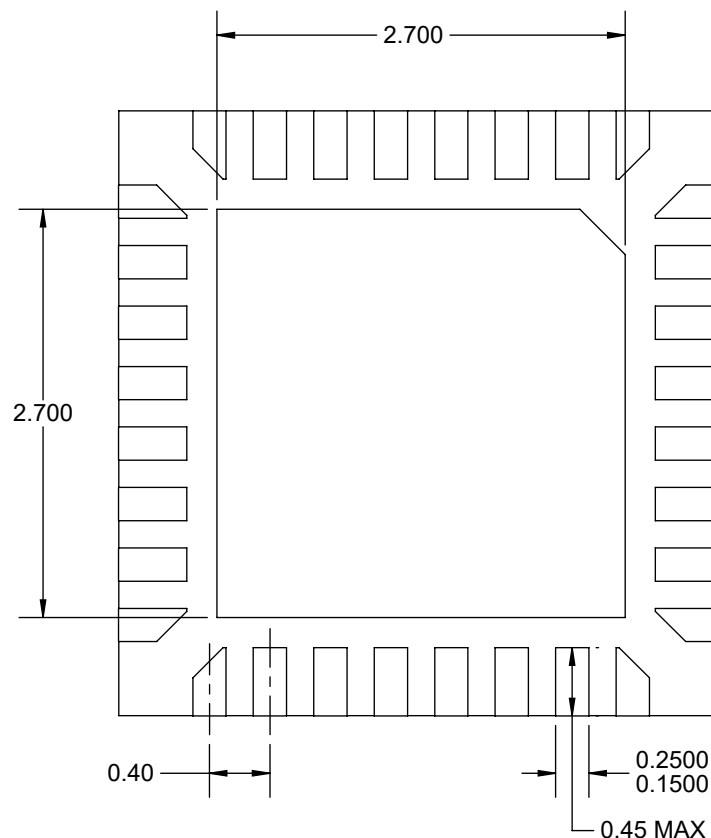
|  |   |                         |                    |            |
|--|---|-------------------------|--------------------|------------|
|  <p><b>SG25-QFN-2001 Drawing</b><br/>Ironwood Electronics, Inc.<br/>Tele: (800) 404-0204<br/>www.ironwoodelectronics.com</p> | <p>Material: N/A<br/>Finish: N/A<br/>Weight: 4.32</p> | STATUS: Released        | SHEET: 2 OF 4      | REV. A     |
|  |   | ENG: S. Faiz            | DRAWN BY: M. Raske | SCALE: 7:1 |
|  |   | FILE: SG25-QFN-2001 Dwg | DATE: 09/15/2016   |            |



**TOP VIEW**



**SIDE VIEW**



**BOTTOM VIEW**


Dimensions are in millimeters.

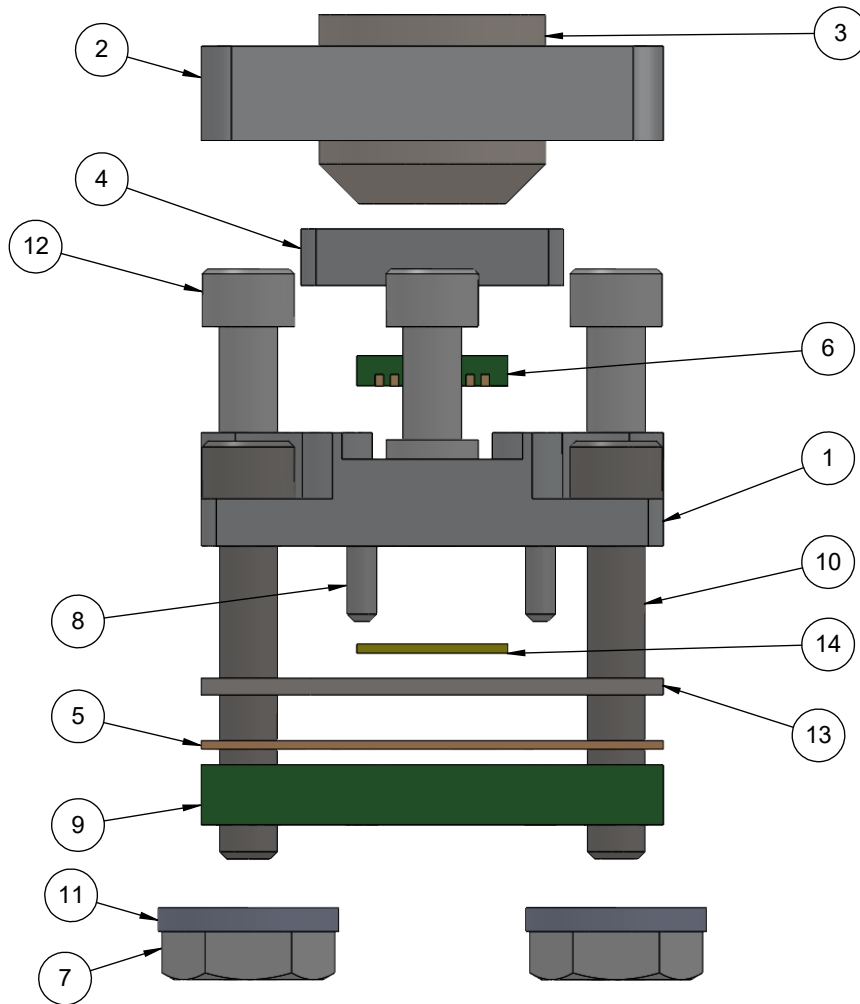
1. Interpret dimensions and tolerances per ASME Y14.5M-1994.

### Description: Compatible Device

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

|  |   |                         |                    |             |
|--|---|-------------------------|--------------------|-------------|
|  <p><b>SG25-QFN-2001 Drawing</b><br/>Ironwood Electronics, Inc.<br/>Tele: (800) 404-0204<br/>www.ironwoodelectronics.com</p> | <p>Material: N/A<br/>Finish: N/A<br/>Weight: 4.32</p> | STATUS: Released        | SHEET: 3 OF 4      | REV. A      |
|  |   | ENG: S. Faiz            | DRAWN BY: M. Raske | SCALE: 20:1 |
|  |   | FILE: SG25-QFN-2001 Dwg | DATE: 09/15/2016   |             |




| ITEM NO. | DESCRIPTION   | Material   |
|----------|---|--|
| 1        | Socket Base 7mm   | 7075-T6 (SN)   |
| 2        | Socket Lid 7mm  | 7075-T6 Aluminum Alloy   |
| 3        | Compression Screw M6x1                                  | Stainless Steel (18-8)   |
| 4        | Compression Plate 7mm IC, 1.5mm thick                   | 7075-T6 (SN)   |
| 5        | ELSTOMER GUIDE SG25, 4MM                                | Ultem  |
| 6        | TEST CHIP QFN32, 4MM, 0.4                               | Material <not specified>   |
| 7        | Nut, #0-80, SS  | Stainless Steel (18-8)   |
| 8        | Alignment Pin 1/32" dia. x 1/8" lng                     | Chrome Stainless Steel   |
| 9        | TEST PCB QFN32, 4MM, 0.4                                | Material <not specified>   |
| 10       | #0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE | Alloy Steel  |
| 11       | Washer, #0 x .025", Nylon                               | Nylon 6/6  |
| 12       | #0-80 Shoulder Screw, 1.59mm thread length              | Stainless Steel (303)  |
| 13       | IC (MLF) Guide  | PEEK   |
| 14       | 0.25mm thick, 0.05x 0.05mm pitch elastomer              | 20 Micron dia gold plated brass filaments arranged symmettrically in a silicon rubber (63.5 degree angle), Thickness: 0.25mm |

### Description: Socket.

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

|  |  |                         |                    |            |
|--|--|-------------------------|--------------------|------------|
|  <b>SG25-QFN-2001 Drawing</b><br>Ironwood Electronics, Inc.<br>Tele: (800) 404-0204<br>www.ironwoodelectronics.com | Material: N/A<br>Finish: N/A<br>Weight: 4.32 | STATUS: Released        | SHEET: 4 OF 4      | REV. A     |
|  |  | ENG: S. Faiz            | DRAWN BY: M. Raske | SCALE: 5:1 |
|  |  | FILE: SG25-QFN-2001 Dwg | DATE: 09/15/2016   |            |