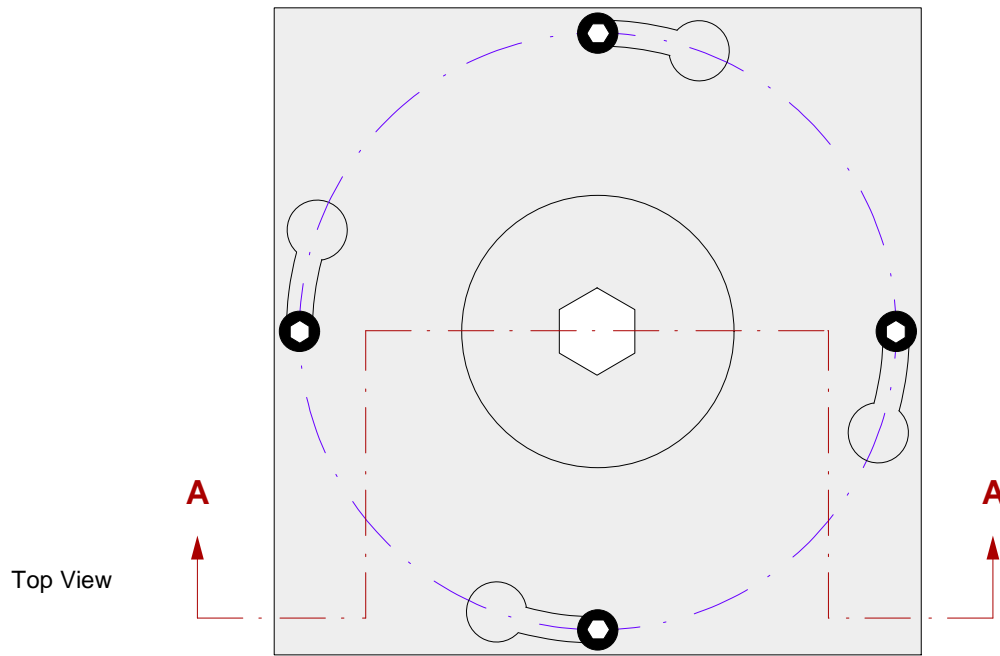


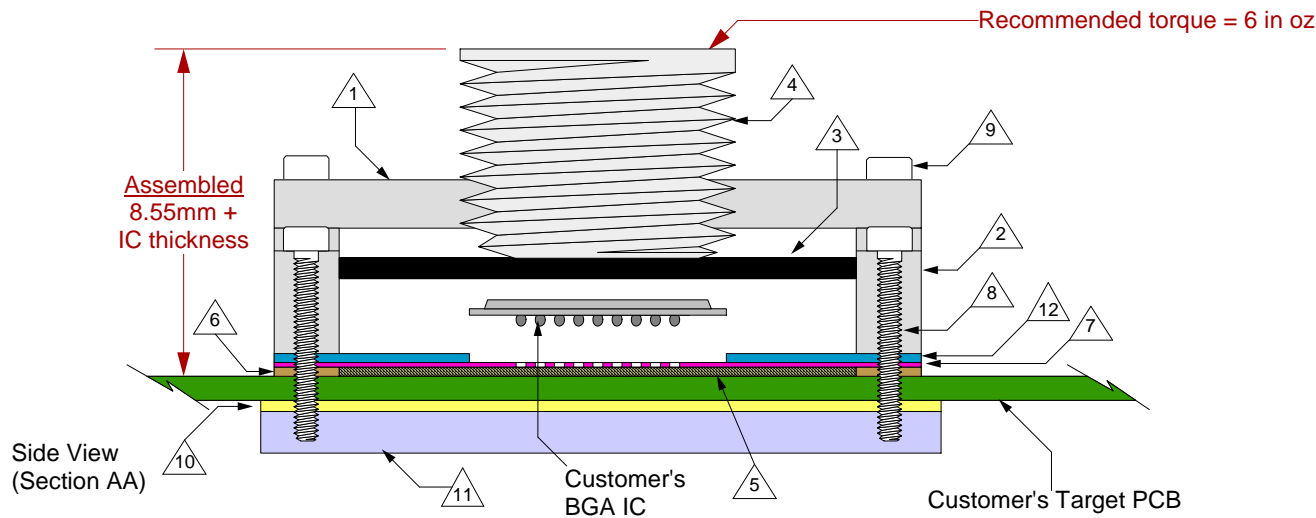
GHz BGA Socket - Direct mount, solderless

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
- Easily removable swivel socket lid




Top View



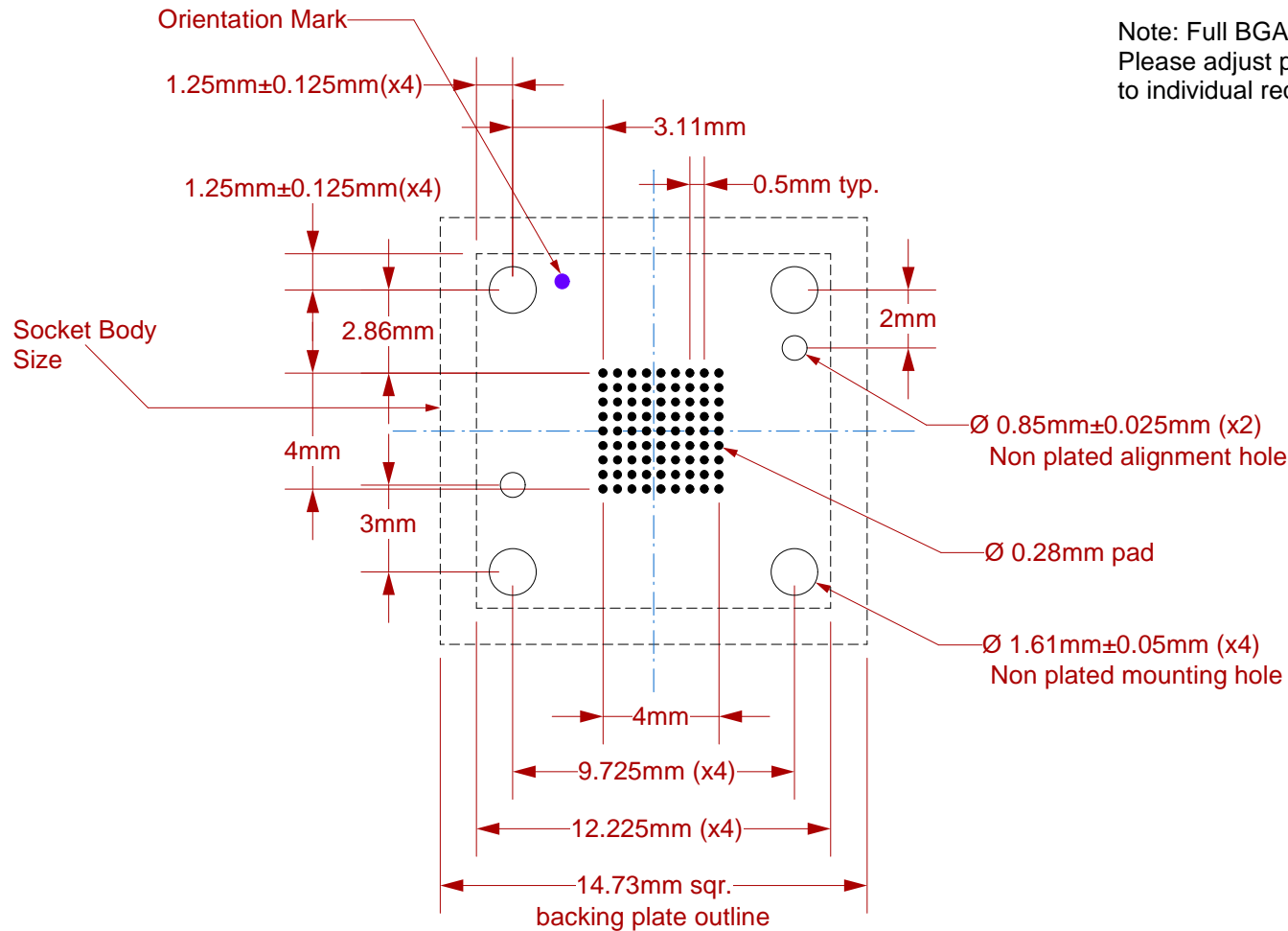
Side View
(Section AA)

- △ 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- △ 2 Socket base: Black anodized Aluminum. Thickness = 5mm.
- △ 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- △ 4 Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
- △ 5 Elastomer: 20 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.5mm.
- △ 6 Elastomer Guide: Non-clad FR4. Thickness = 0.475mm.
- △ 7 Ball Guide: Kapton polyimide.
- △ 8 Socket base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 12.7mm long.
- △ 9 Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
- △ 10 Insulation Plate: FR4/G10, Thickness = 1.59mm.
- △ 11 Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.
- △ 12 IC Guide: FR4/G10

| | | | | |
|---|--|-----------------------|------------------------|---------------|
|  | SG-BGA-7048 Drawing | Status: Released | Scale: - | Rev: C |
| | © 2009 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com | Drawing: H. Hansen | | Date: 6/20/05 |
| | | File: SG-BGA-7048 Dwg | Modified: 2/24/10, MAF | |

All tolerances: $\pm 0.125\text{mm}$ (unless stated otherwise). Materials and specifications are subject to change without notice.

***Note: BGA pattern is not symmetrical with respect to the mounting holes.**




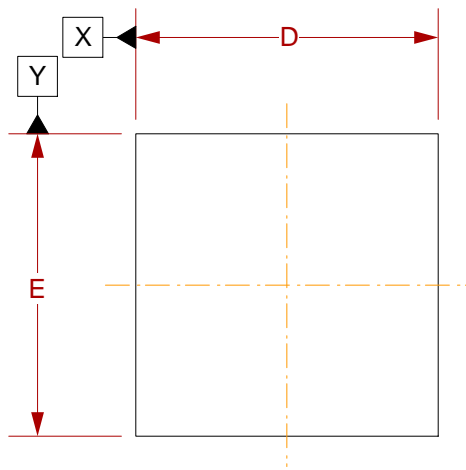
Note: Full BGA pattern shown.
Please adjust pattern according to individual requirements.

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

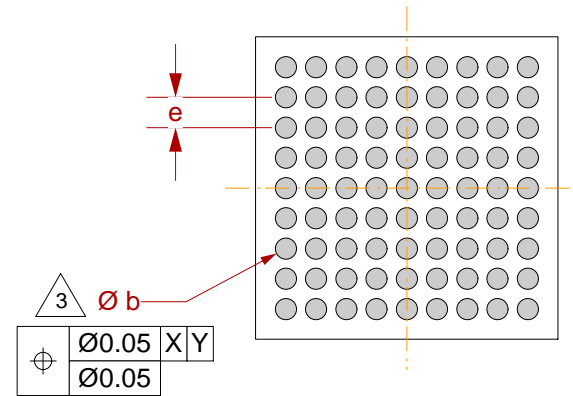
All dimensions are in mm unless stated otherwise

Recommended PCB Layout Tolerances: $\pm 0.025\text{mm}$ [$\pm 0.001''$] unless stated otherwise.

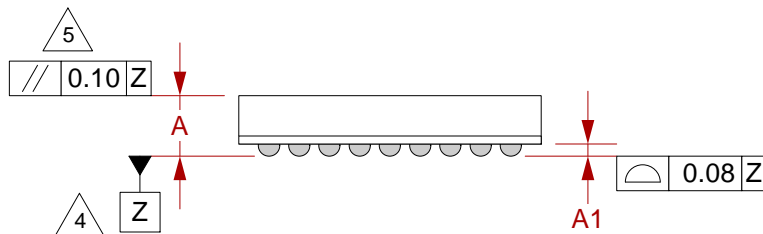
| | | | | |
|---|--|-----------------------|------------------------|---------------|
|  | SG-BGA-7048 Drawing | Status: Released | Scale: 4:1 | Rev: C |
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| | | File: SG-BGA-7048 Dwg | Modified: 2/24/10, MAF | |



Top View



Bottom View



End View


1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5. Parallelism measurement shall exclude any effect of mark on top surface of package.

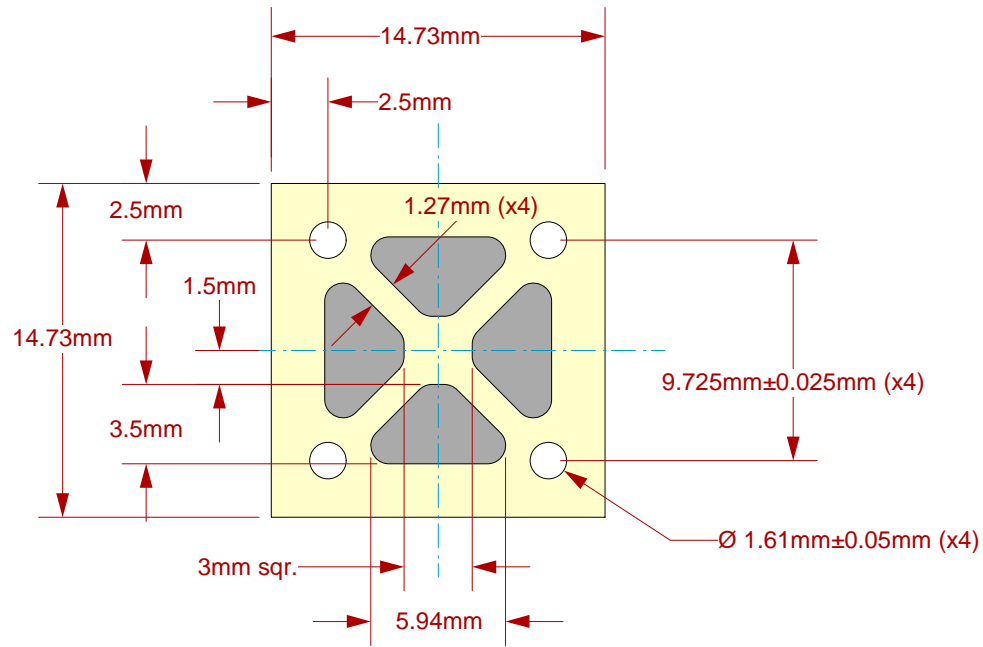
| DIM | MIN | MAX |
|-----|---------|------|
| A | | 1.0 |
| A1 | 0.11 | 0.21 |
| b | | 0.35 |
| D | 5.0 BSC | |
| E | 5.0 BSC | |
| e | 0.5 BSC | |

9 x 9 array

All dimensions are in mm unless stated otherwise

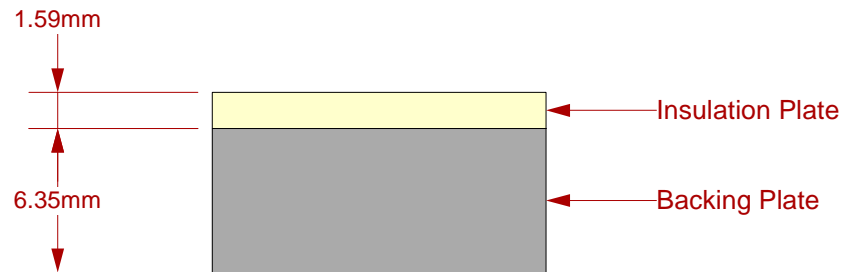
| | | | | |
|---|--|-----------------------|------------------------|--------|
|  | SG-BGA-7048 Drawing | Status: Released | Scale: 1:0.125 | Rev: C |
| | © 2009 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com | Drawing: H. Hansen | Date: 6/20/05 | |
| | | File: SG-BGA-7048 Dwg | Modified: 2/24/10, MAF | |

Top View




Note: Backing plate holes are tapped to accept 0-80 screws.

Side View



Description: Insulation Plate and Backing Plate

All dimensions are in mm.
All tolerances are $\pm 0.125\text{mm}$.
(Unless stated otherwise)

| | | | | |
|---|--|-----------------------|----------|------------------------|
|  | © 2009 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com | Status: Released | Scale: - | Rev: C |
| | | Drawing: H. Hansen | | Date: 6/20/05 |
| | | File: SG-BGA-7048 Dwg | | Modified: 2/24/10, MAF |