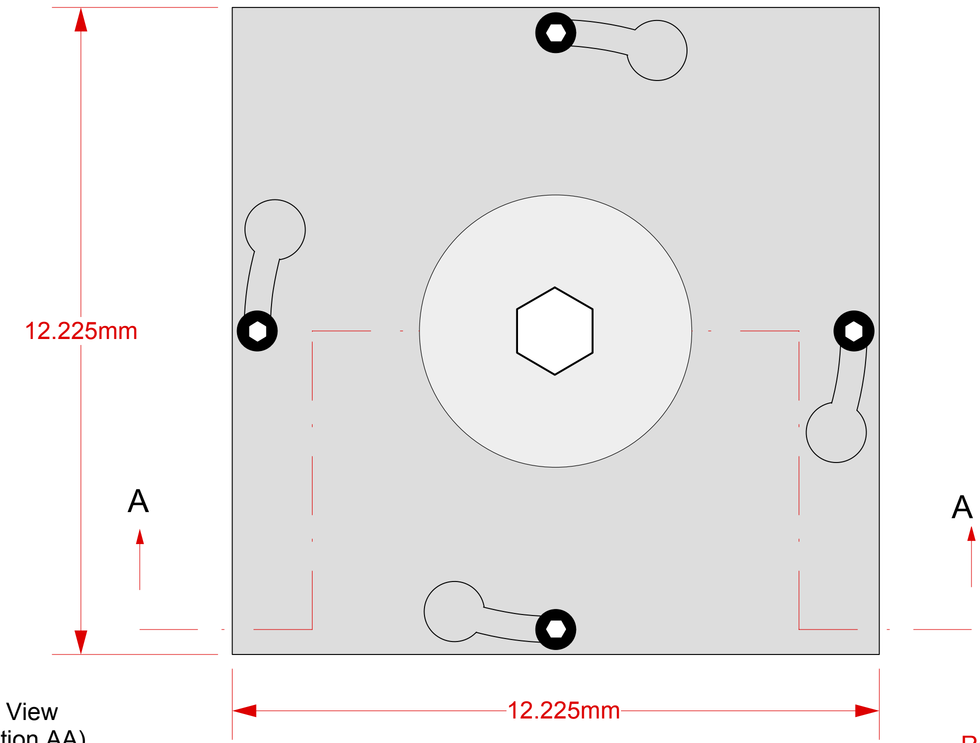
GHz BGA Socket - Direct mount, solderless

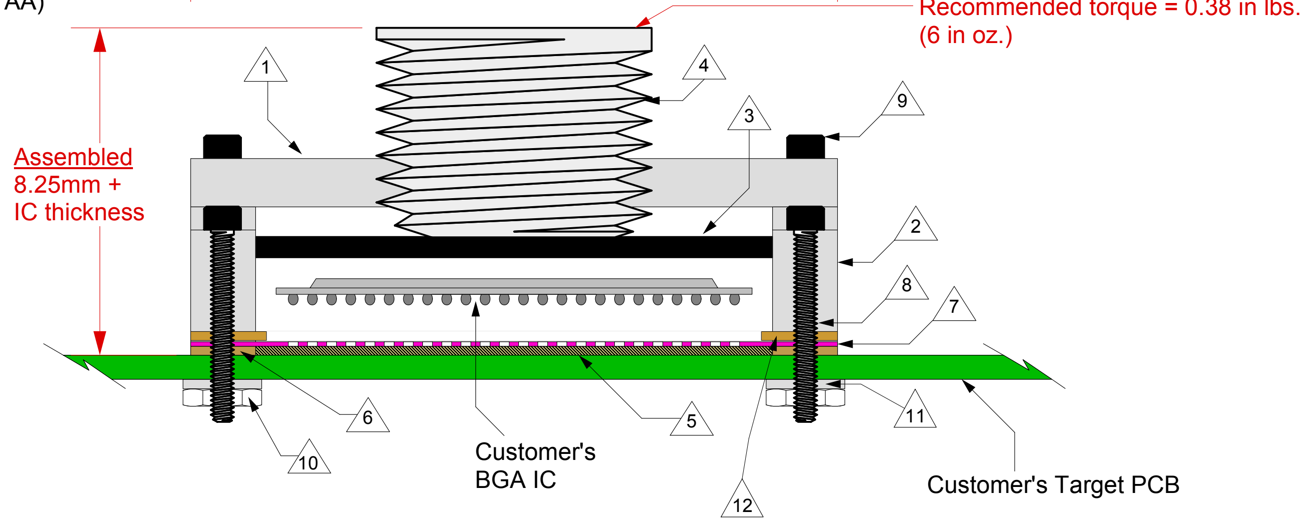
Features

- 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

Top View



Side View
(Section AA)



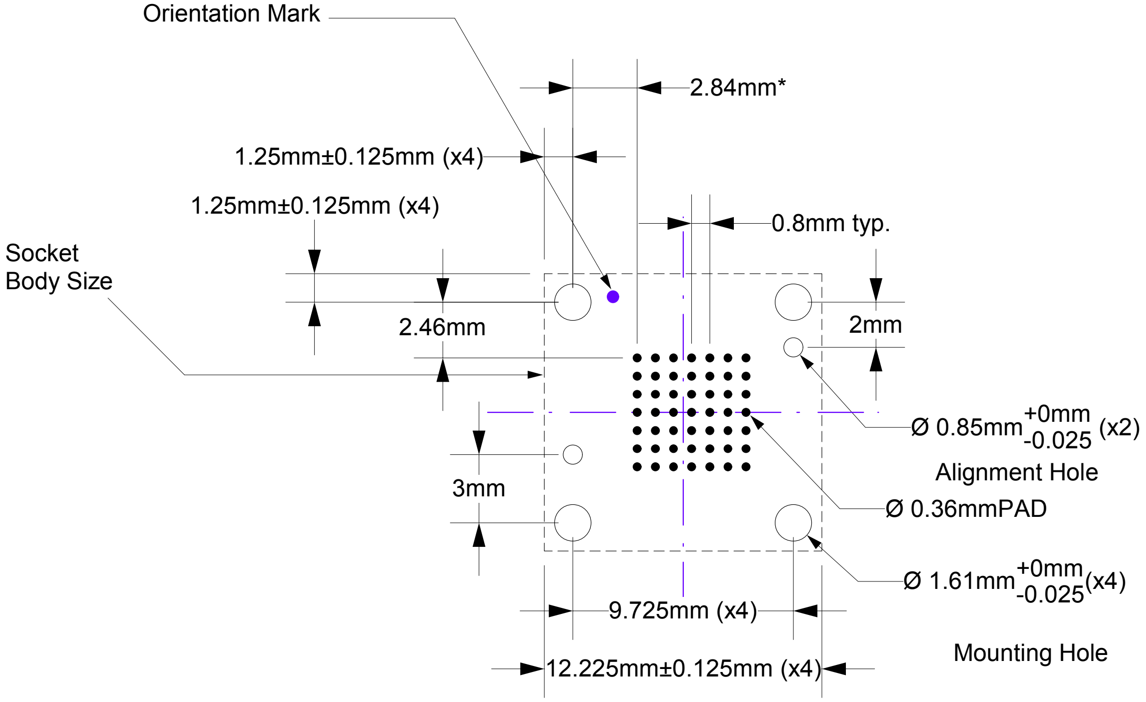
1	Socket Lid: Black anodized 6061 Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized 6061 Aluminum. Thickness = 5mm.
3	Compression Plate: Black anodized 6061 Aluminum. Thickness = 2.5mm.
4	Compression screw: Black anodized 6061 Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
6	Elastomer Guide: Non-clad FR4. Thickness = 0.75mm.
7	Ball Guide: Kapton polyimide.
8	Socket base screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread , 9.525mm long.
9	Socket lid screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread , 4.76mm long.
10	Socket base nut: 18-8 Stainless steel, 0-80 fine thread.
11	Nylon washer: 1.73mm ID; 4.78mm OD 0.64mm thickness.
12	IC Guide: Ultem 1000 0.60mm thickness.

SG-BGA-6100 Drawing	Status: Released	Scale: -	Rev: B
© 2004 IRONWOOD ELECTRONICS, INC. PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 www.ironwoodelectronics.com	Drawing: H. Hansen	Date: 2/16/04	
	File: SG-BGA-6100 Dwg.mcd	Modified: 4/3/06, MT	

All tolerances: ±0.125mm (unless stated otherwise). Materials and specifications are subject to change without notice.

Recommended PCB Layout
Top View

***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

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

Recommended PCB Layout Tolerances: ±0.025mm [±0.001”] unless stated otherwise.

SG-BGA-6100 Drawing	Status: Released	Scale: 3:1	Rev: B
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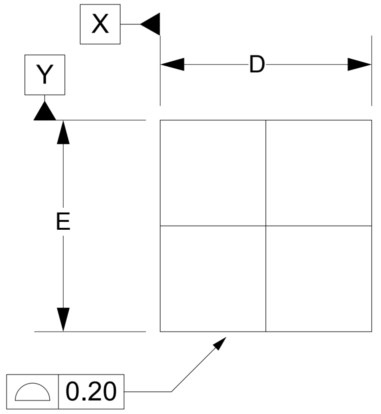
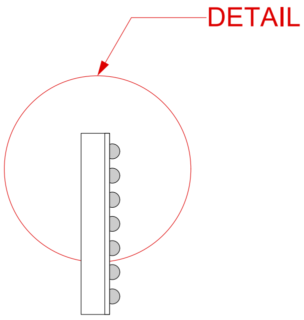
	File: SG-BGA-6100 Dwg.mcd	Modified: 4/3/06, MT	

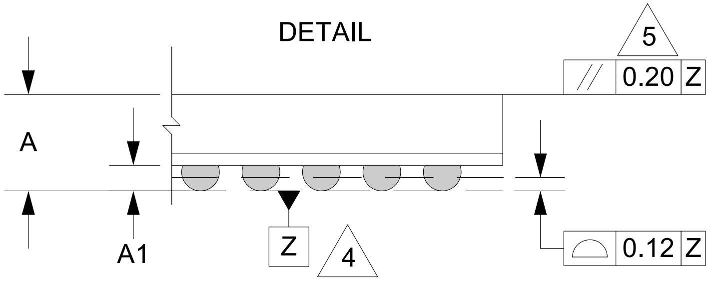
Compatible BGA Spec

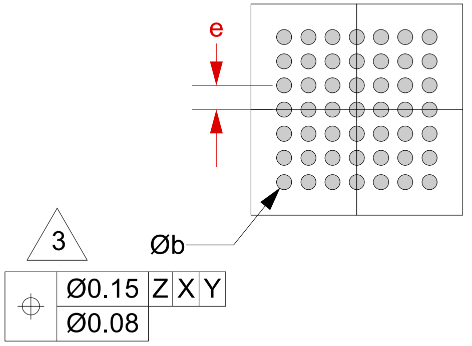


TOP VIEW



SIDE VIEW





BOTTOM VIEW

1. Dimensions are in millimeters.

2. Interpret dimensions and toleraces per ASME Y14.5M-1994.

3 Dimension b is measured at the maximum solder ball diameter, parallel to datum plame 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	1.09	1.29
A1	0.25	0.35
b	0.40	0.50
D	6.00 BSC	
E	6.00 BSC	
e	0.80 BSC	

Array 7x7

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