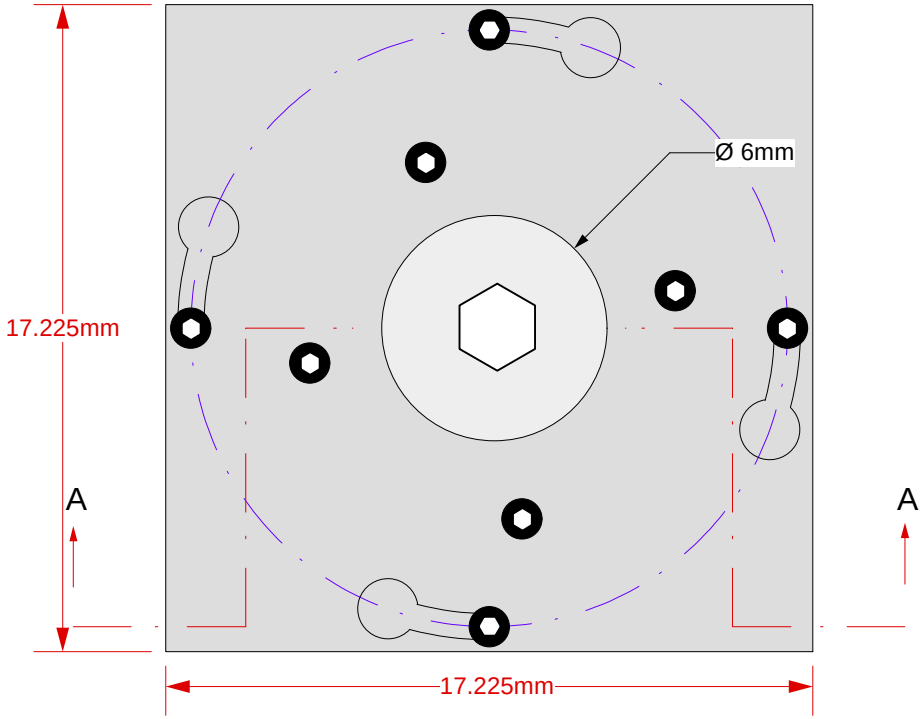
GHz BGA Socket - Direct mount, solderless

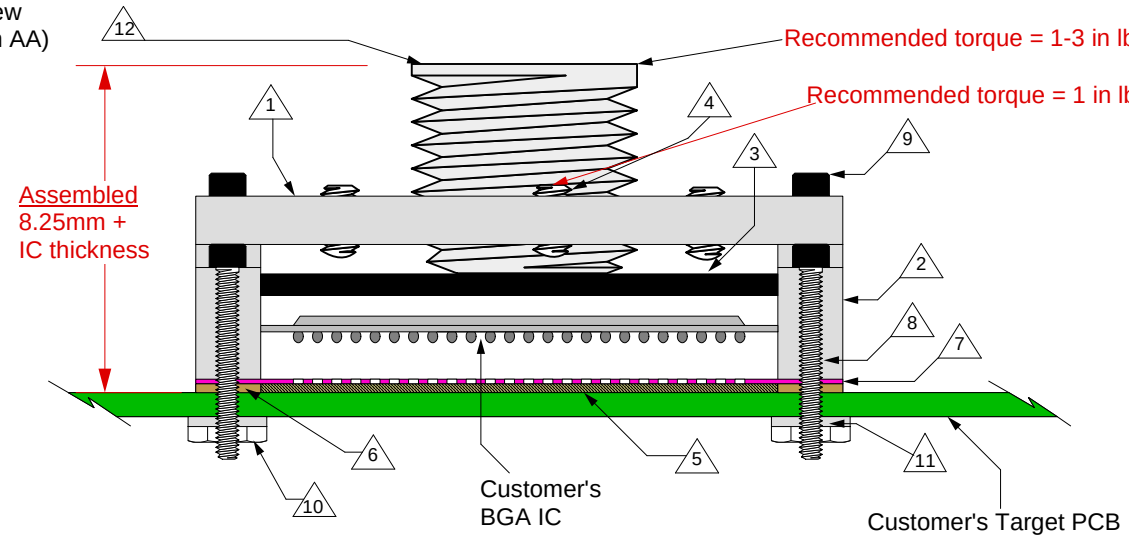
Top View



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

Side View
(Section AA)



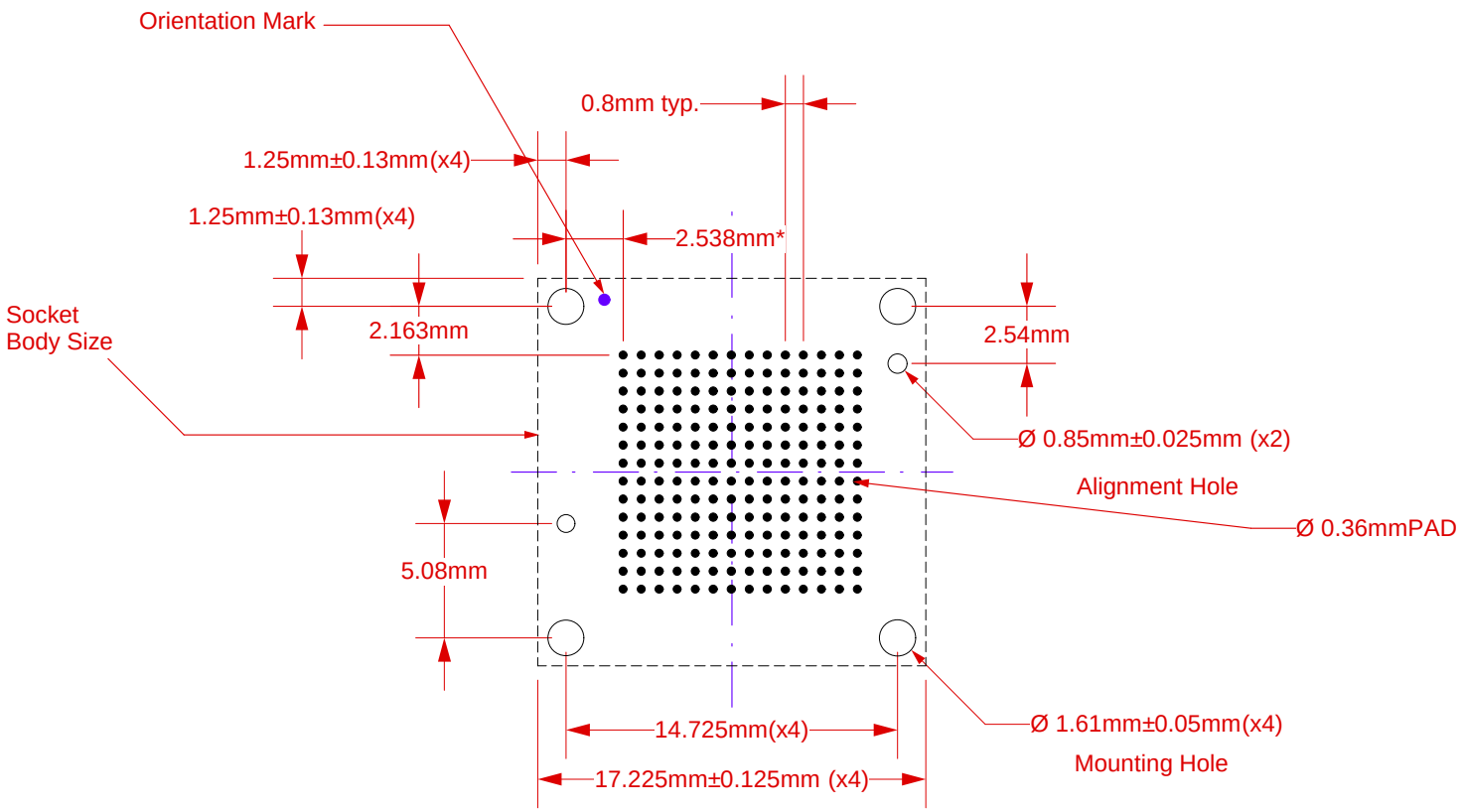
1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm. (x2)
4	Compression screw: Black anodized Aluminum. 3-48 thread (x4)
5	Elastomer: 40 micron dia gold plated brass filaments 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: Shoulder screw, 18-8 SS, 0-80 fine thread.
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	Compression screw: Black anodized Aluminum. Thickness = 5mm, Hex socket = 3mm.

SG-BGA-6152 Drawing	Status: Preliminary	Scale: -	Rev: C
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: M.A.Fedde	Date: 4/14/05	
	File: **SG-BGA-6152** Dwg.mcd	Modified: 6/12/09, AE	

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.**



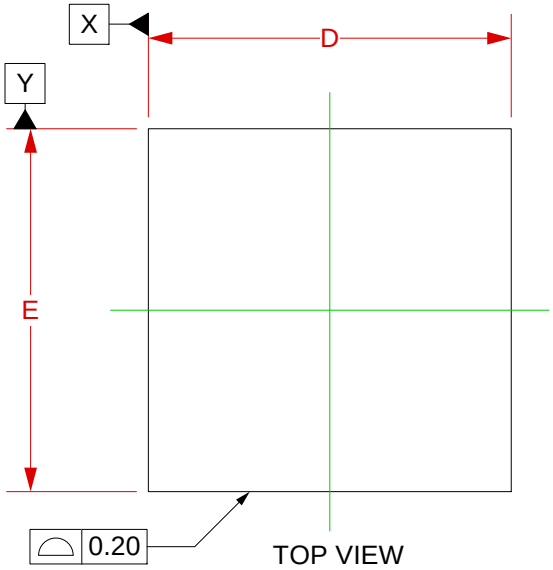
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

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

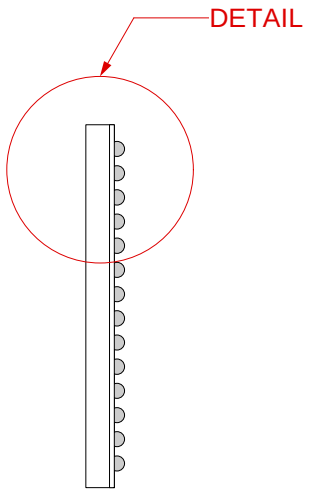
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

SG-BGA-6152 Drawing	Status: Preliminary	Scale: 3:1	Rev: C
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: M.A.Fedde	Date: 4/14/05	
	File: **SG-BGA-6152** Dwg.mcd	Modified: 6/12/09, AE	

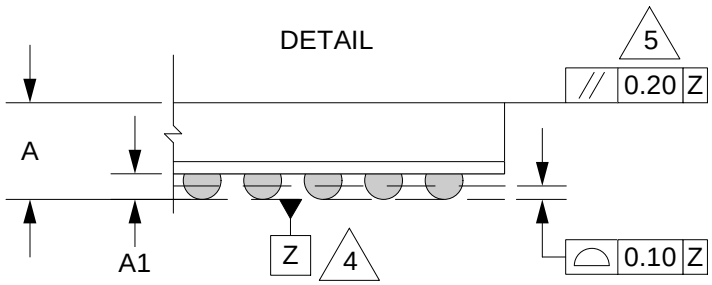
Compatible BGA Spec

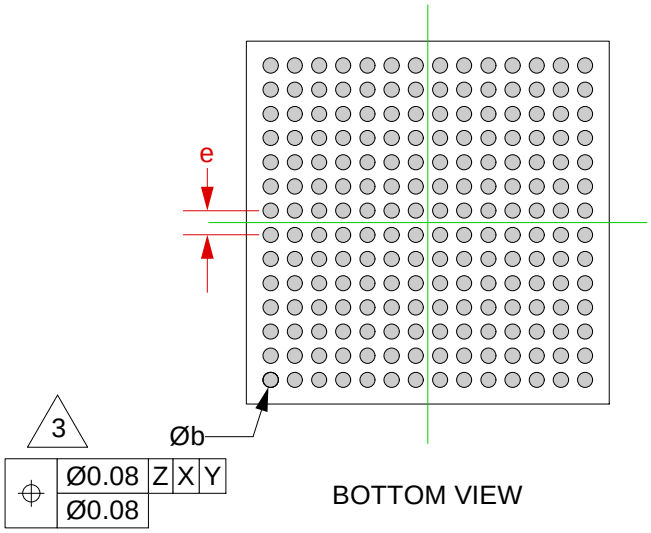


TOP VIEW



SIDE VIEW





BOTTOM 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		1.4
A1	0.35	0.45
b		0.55
D	12.00 BSC	
E	12.00 BSC	
e	0.80 BSC	

Array 14x14

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