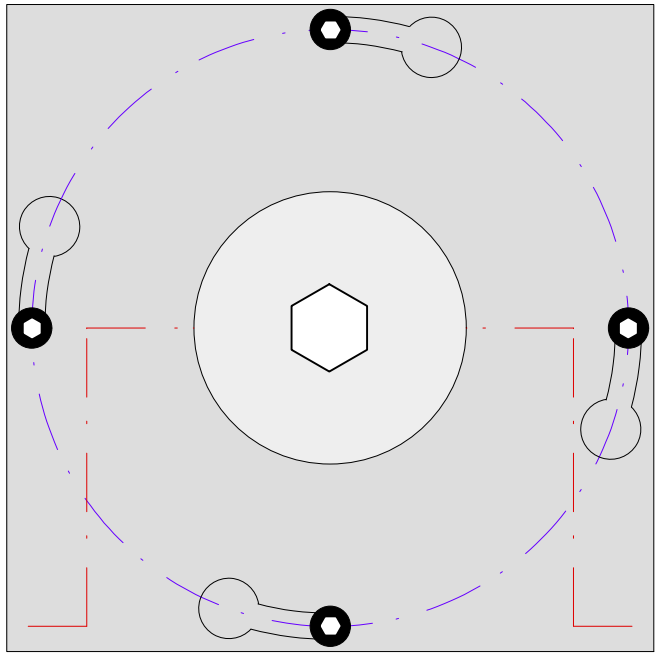
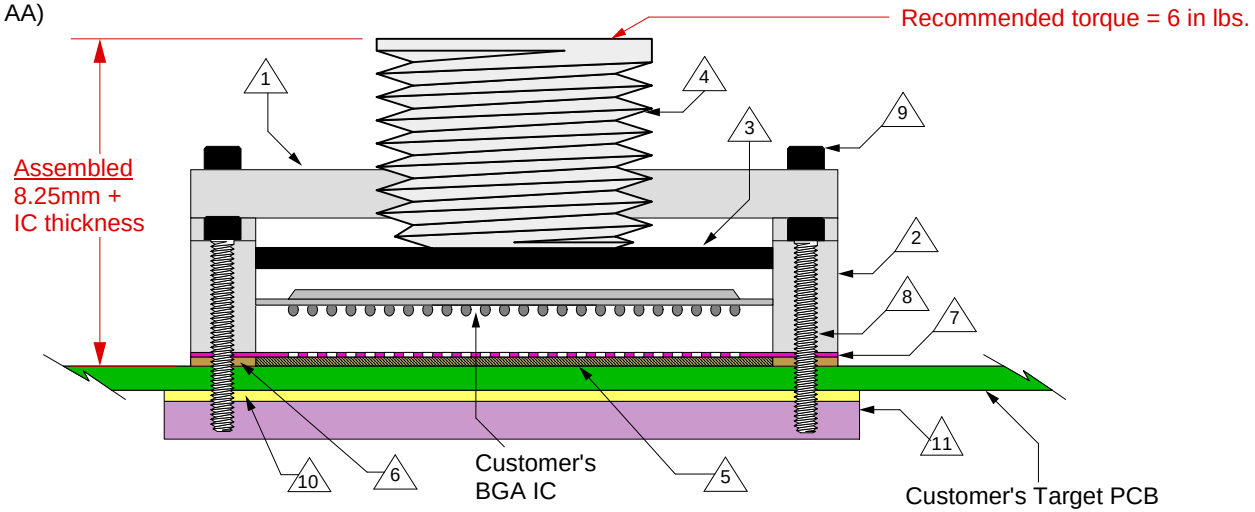
GHz BGA Socket - Direct mount, solderless

Top View



Side View
(Section AA)



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

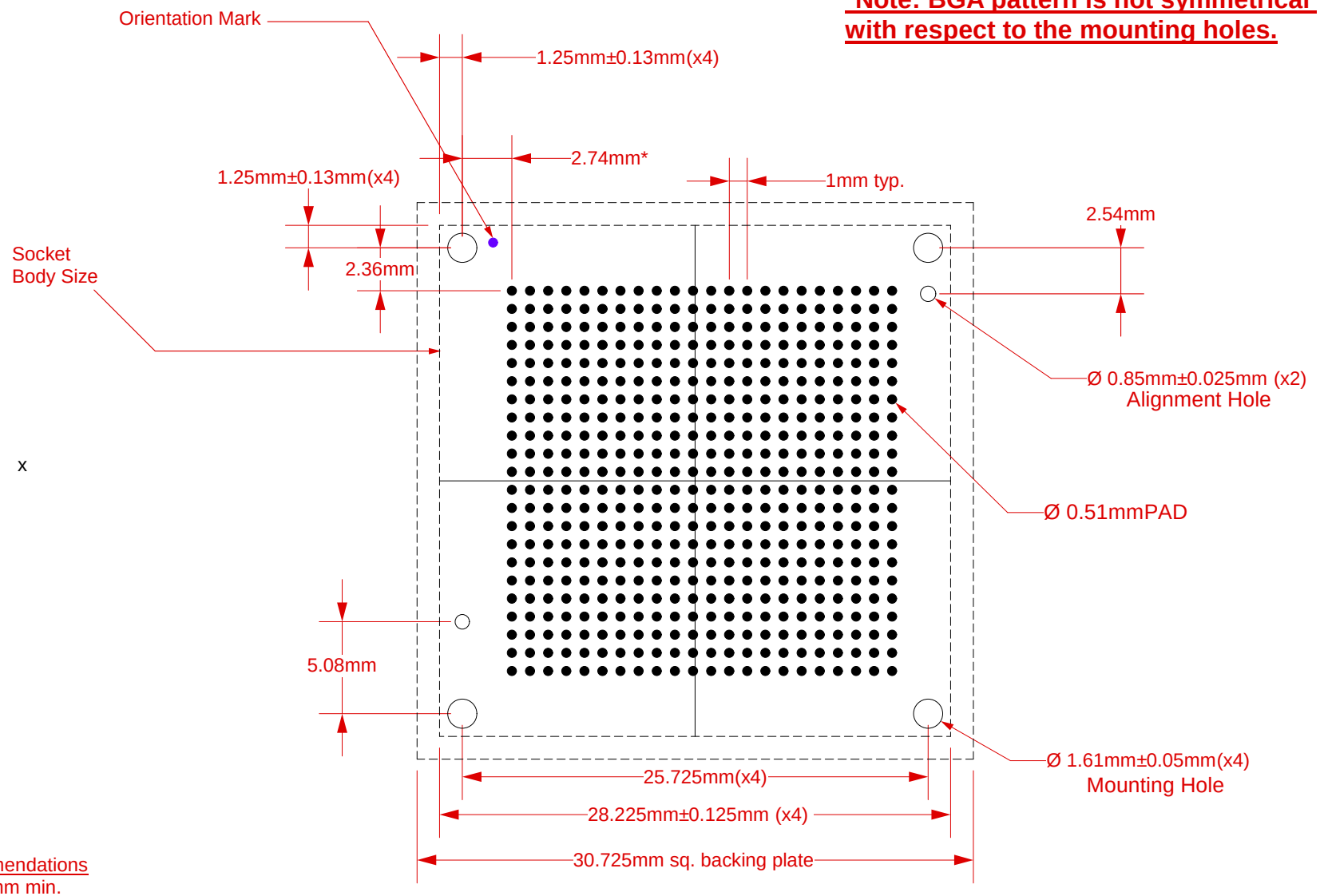
1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
4	Compression screw: Black anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
6	Elastomer Guide: Non-clad FR4. Thickness = 0.725mm.
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.

SG-BGA-6056 Drawing	Status: Released	Scale: -	Rev: E
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen	Date: 8/12/02	
	File: SG-BGA-6056 Dwg.mcd	Modified: 7/6/09, 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.**



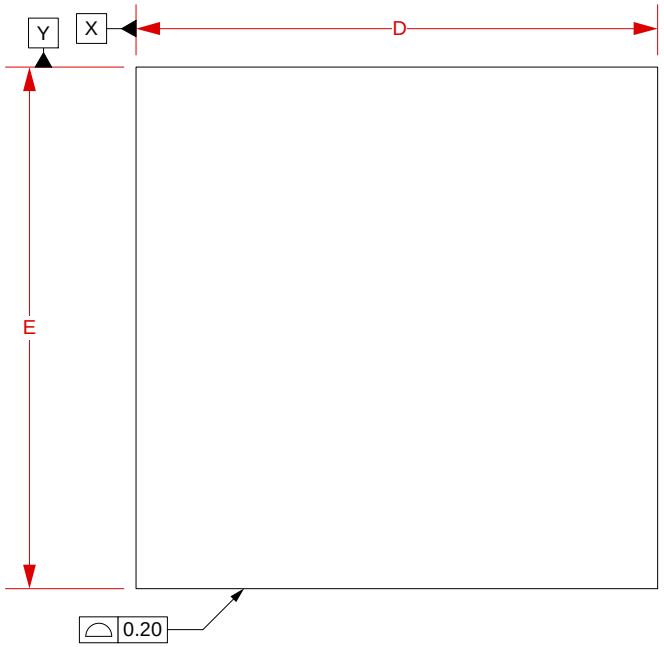
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

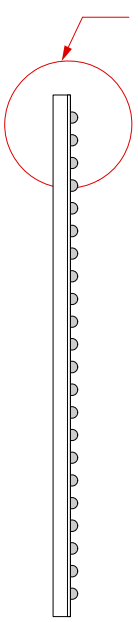
NOTE: Steel backing plate may be required based on end user's application

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

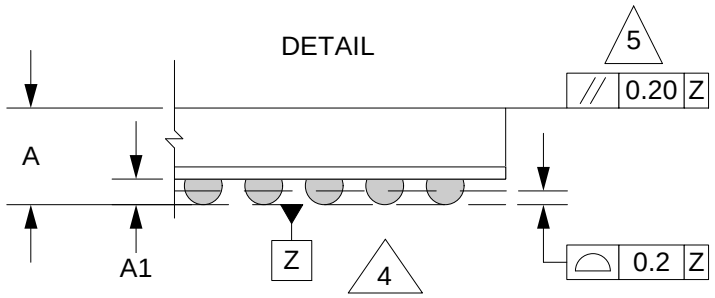
SG-BGA-6056 Drawing	Status: Released	Scale: -	Rev: E
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 8/12/02
	File: SG-BGA-6056 Dwg.mcd		Modified: 7/6/09, AE

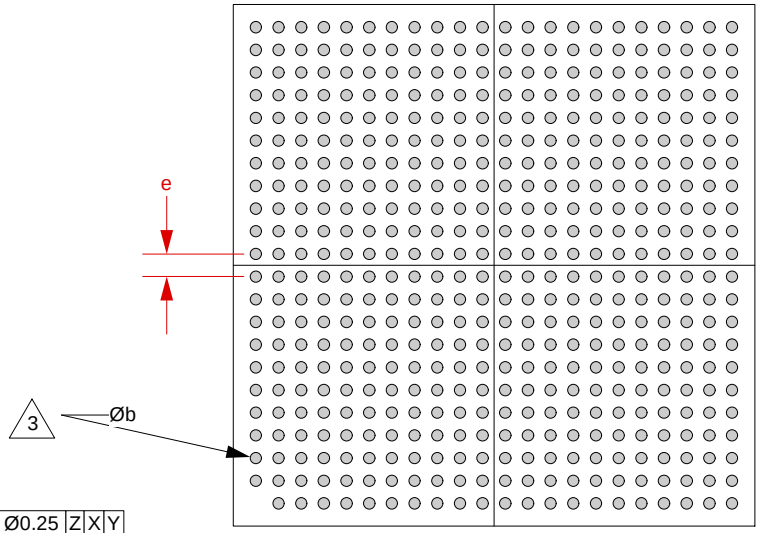
TOP VIEW





SIDE VIEW





BOTTOM VIEW

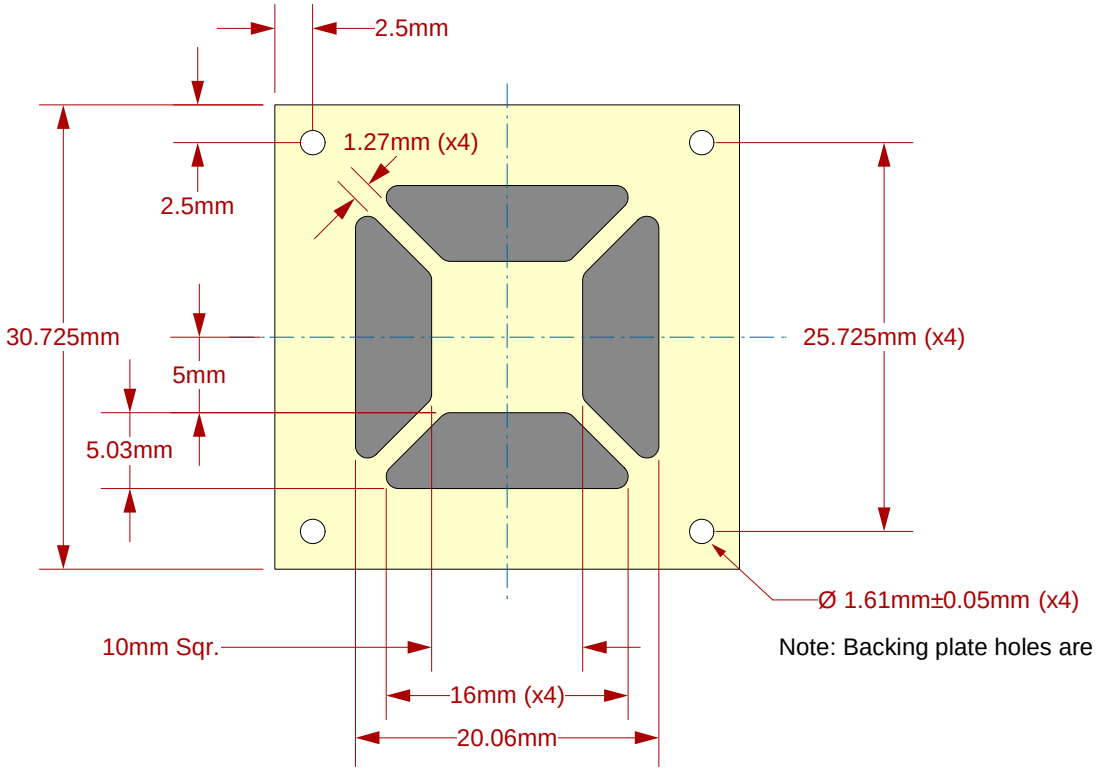
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX
A		2.5
A1	0.3	0.5
b		0.65
D	23.00 BSC	
E	23.00 BSC	
e	1.0 BSC	

Array 22x22

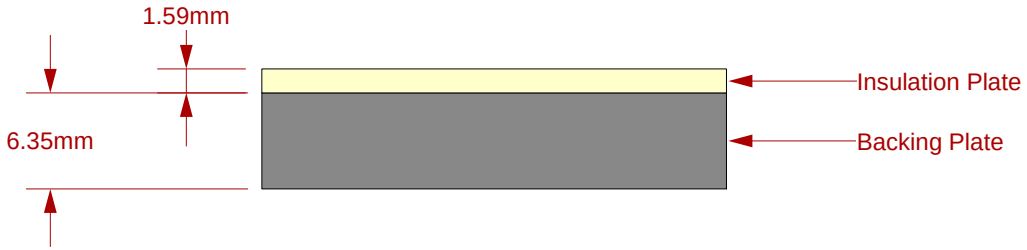
SG-BGA-6056 Drawing	Status: Released	Scale: -	Rev: E
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen	Date: 8/12/02	
	File: SG-BGA-6056 Dwg.mcd	Modified: 7/6/09, AE	

Top View



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

Side View



Description: Backing Plate with Insulation Plate

SG-BGA-6056 Drawing	Status: Released	Scale: -	Rev: E
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 8/12/02
	File: SG-BGA-6056 Dwg.mcd		Modified: 7/6/09, AE

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