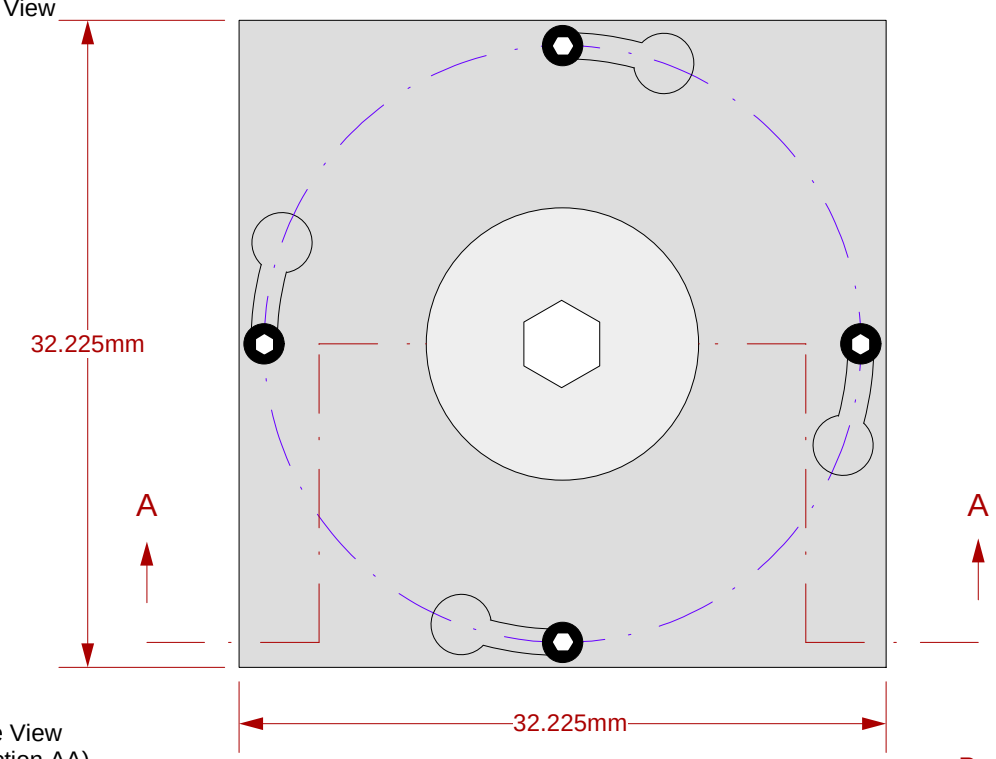
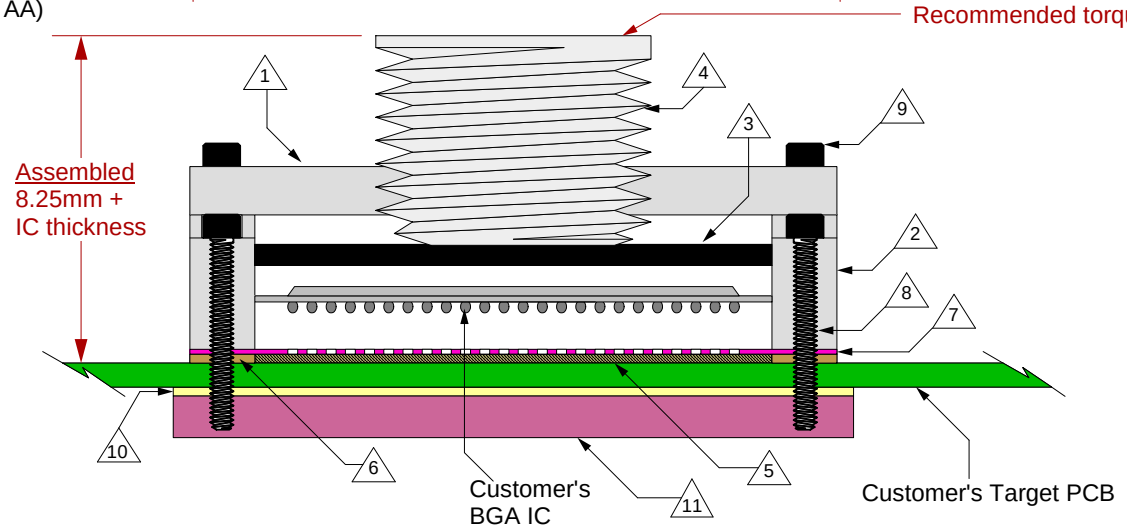
GHz BGA Socket - Direct mount, solderless

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

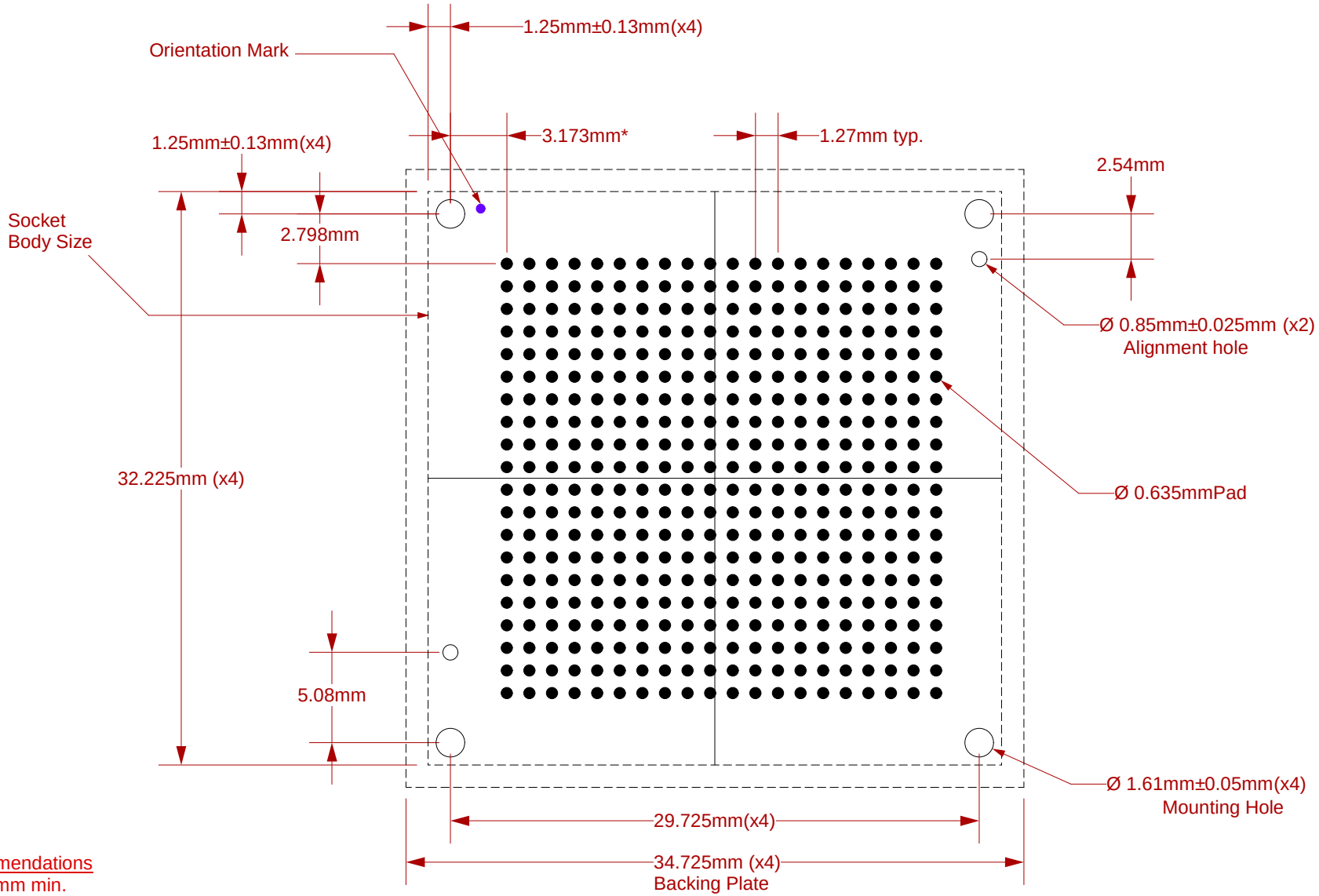
1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
4	Compression screw: Black anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass 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: Fillister head, Alloy steel with black oxide finish, 0-80 fine thread , 0.625" long.
9	Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
10	Insulation Plate: FR4/G10, 1.59mm thick.
11	Backing Plate: Anodized Aluminum 6.35mm thick.

SG-BGA-6140 Drawing	Status: Released	Scale: -	Rev: B
 PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 www.ironwoodelectronics.com	Drawing: B.ROUX	Date: 12/16/04	
	File: SG-BGA-6140 Dwg	Modified: 5/19/09	

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-6140 Drawing	Status: Released	Scale: 3:1	Rev: B
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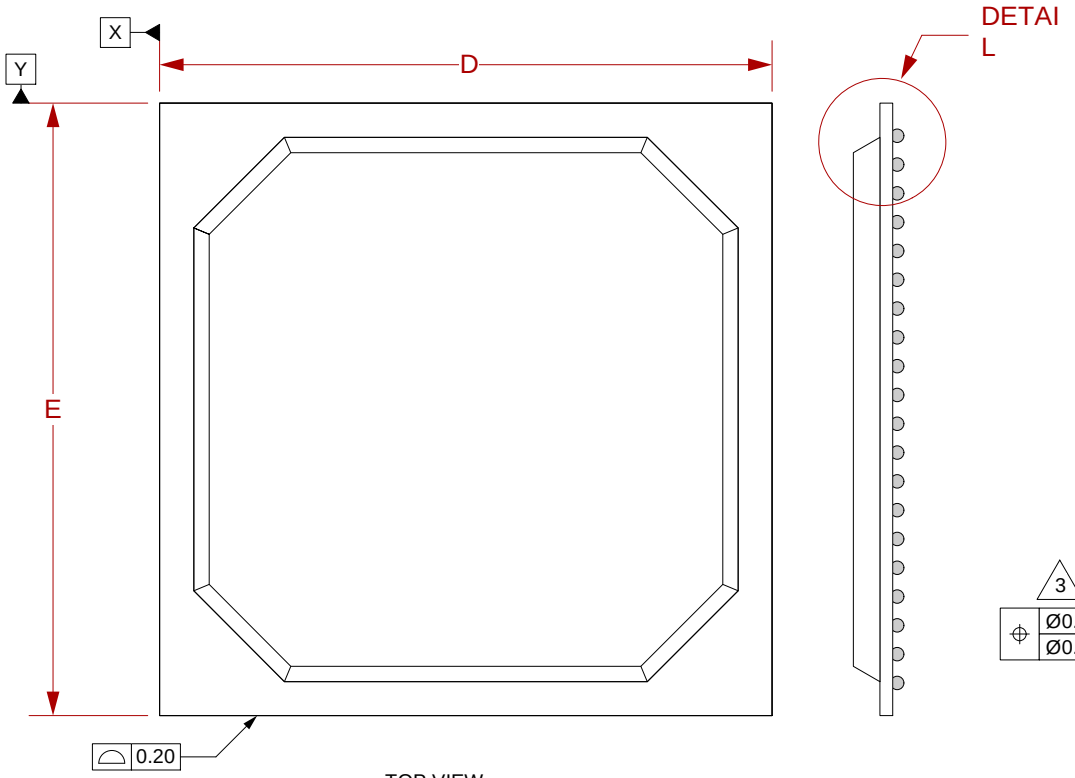
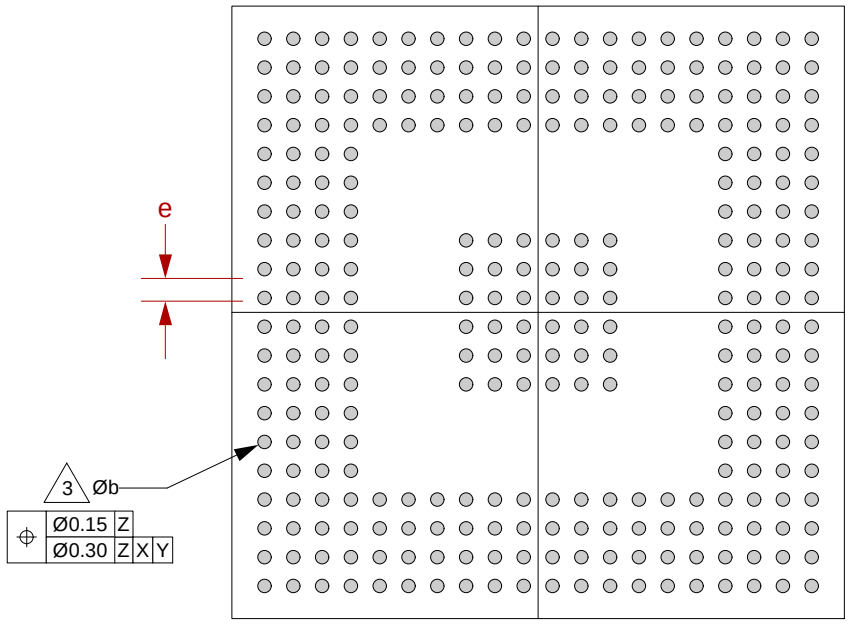
	File: SG-BGA-6140 Dwg	Modified: 5/19/09	

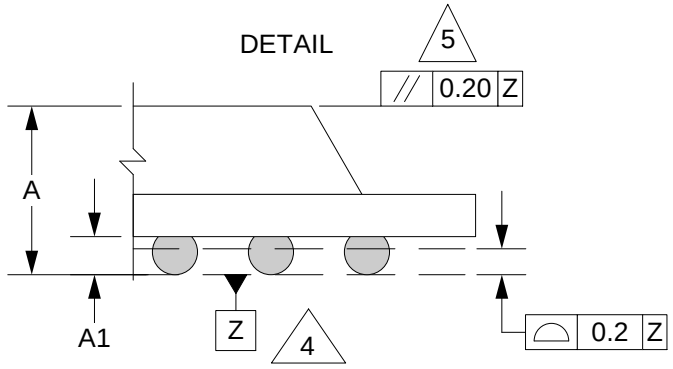


TOP VIEW

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		2.21
A1	0.3	0.5
b		0.60
D	27.00 BSC	
E	27.00 BSC	
e	1.27 BSC	

Array 20x20

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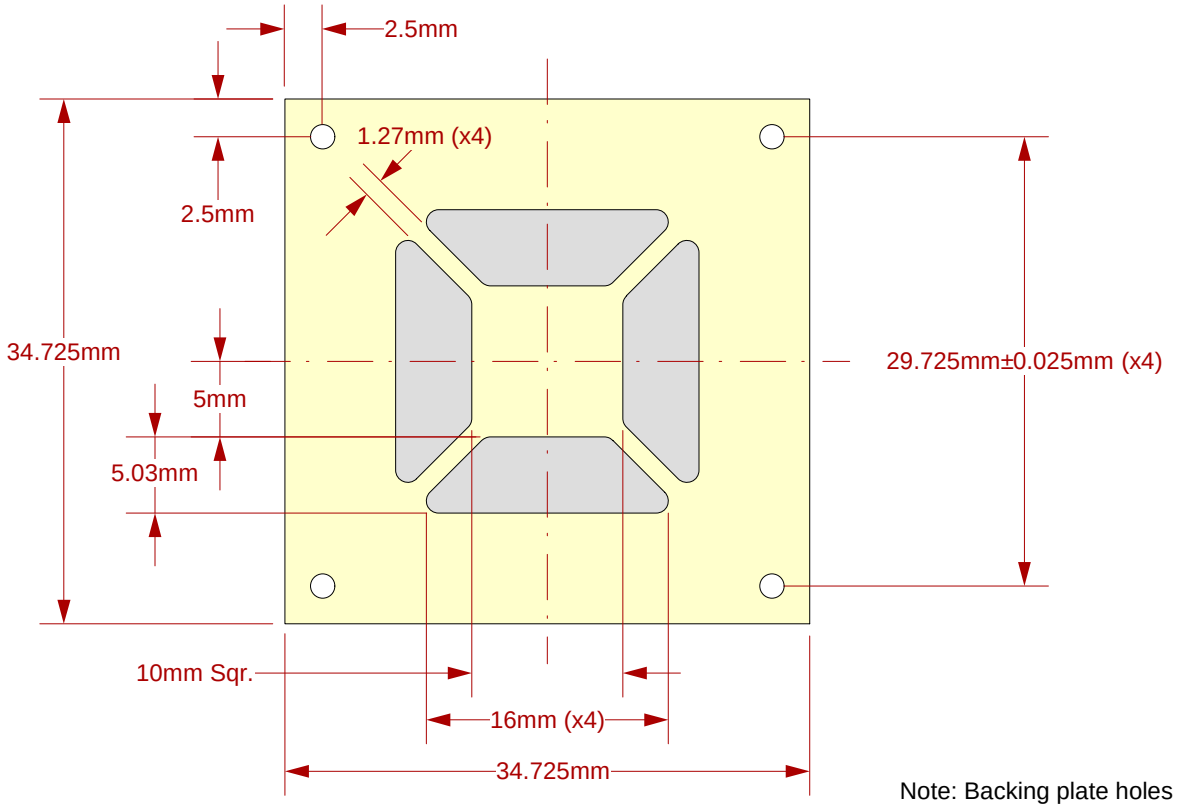
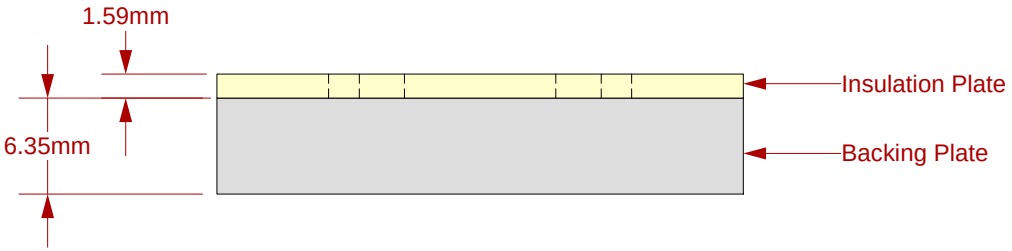
Top View



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

Side View



Description: Backing Plate with Insulation Plate

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All dimensions are in mm.
All tolerences are +/- 0.125mm.
(Unless stated otherwise)