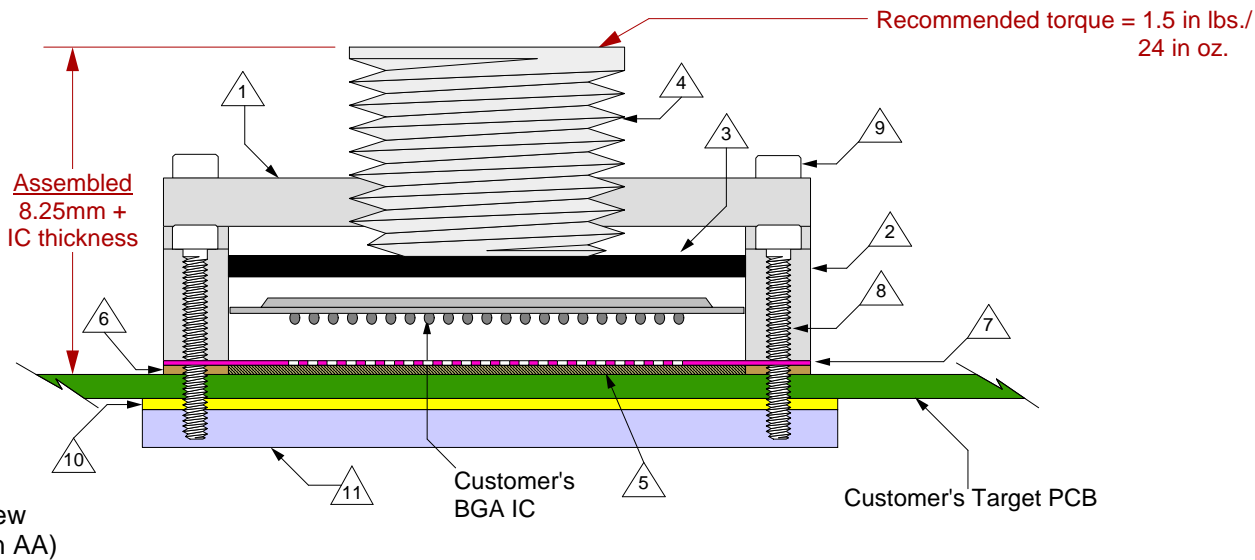
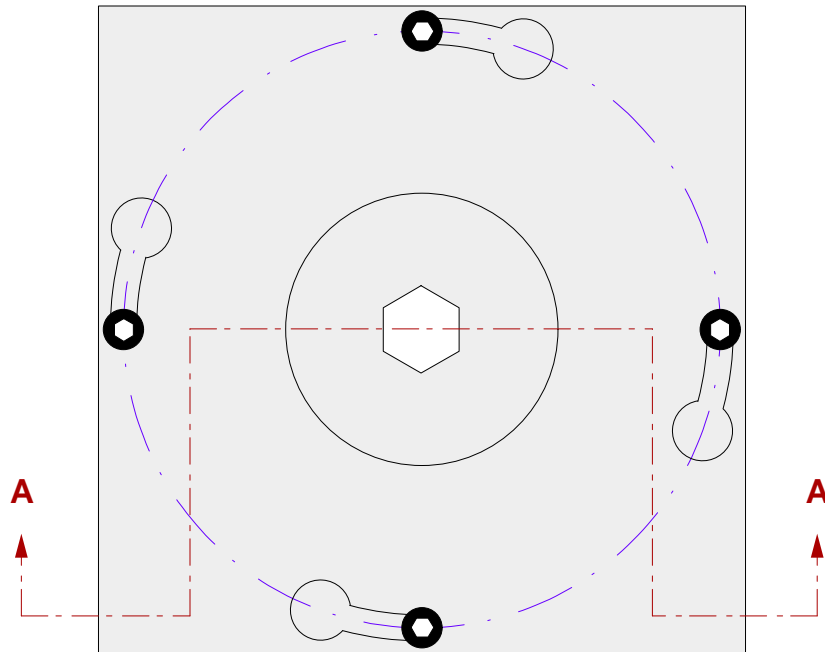


# GHz BGA Socket - Direct mount, solderless

## 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



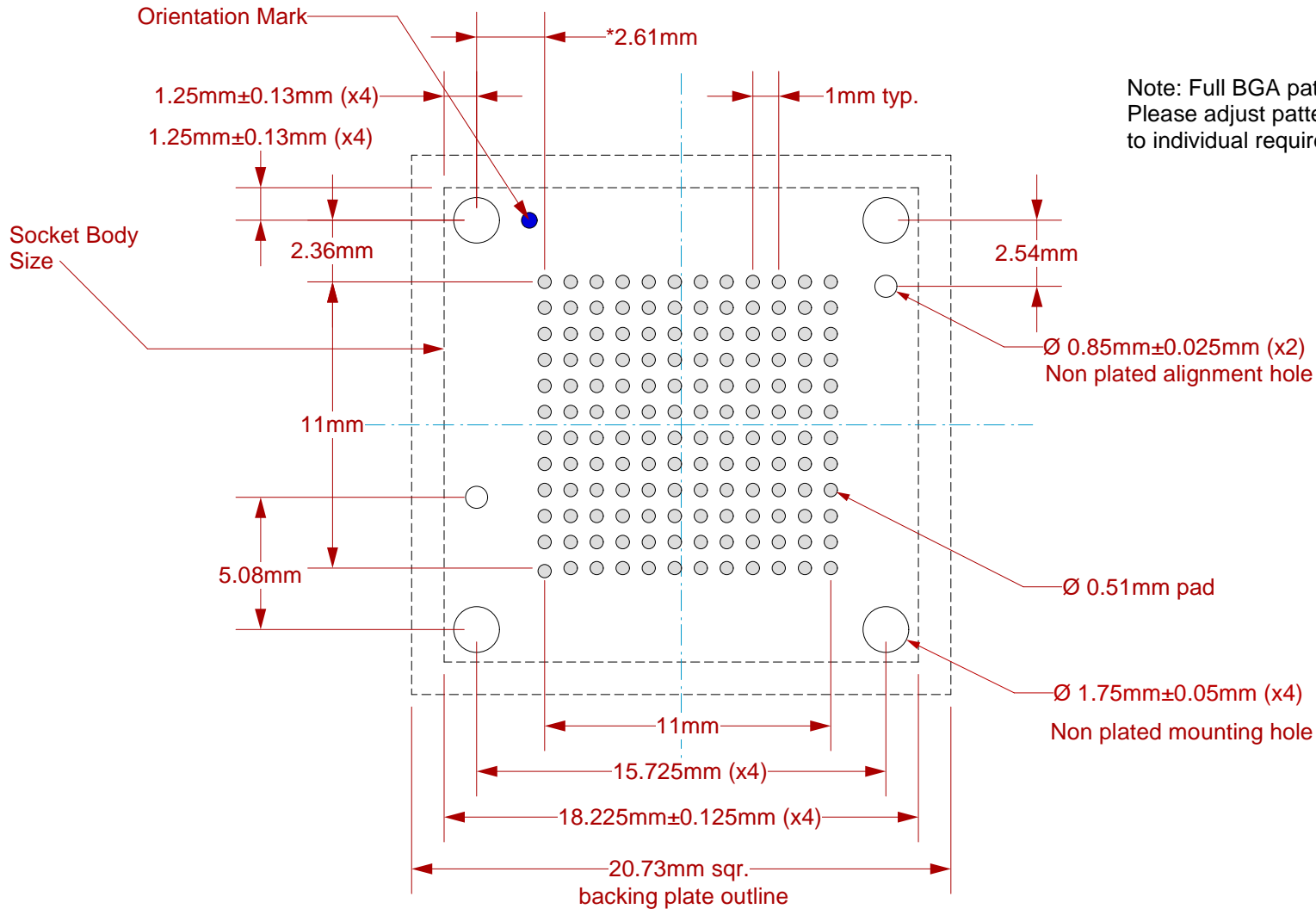
Side View  
(Section AA)

- △ 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, 15.875mm 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.

	<b>SG-BGA-8005 Drawing</b>	Status: Released	Scale: -	Rev: B
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 7/30/07	
		File: SG-BGA-8005 Dwg	Modified: 6/12/09, AE	

All tolerances: ±0.125mm (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.

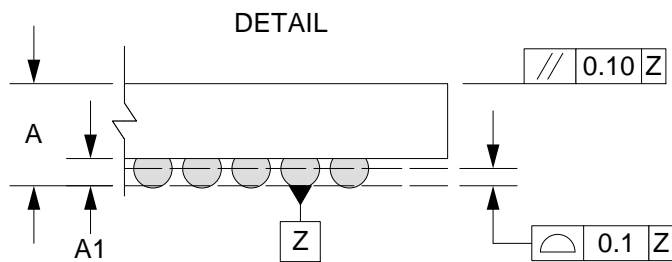
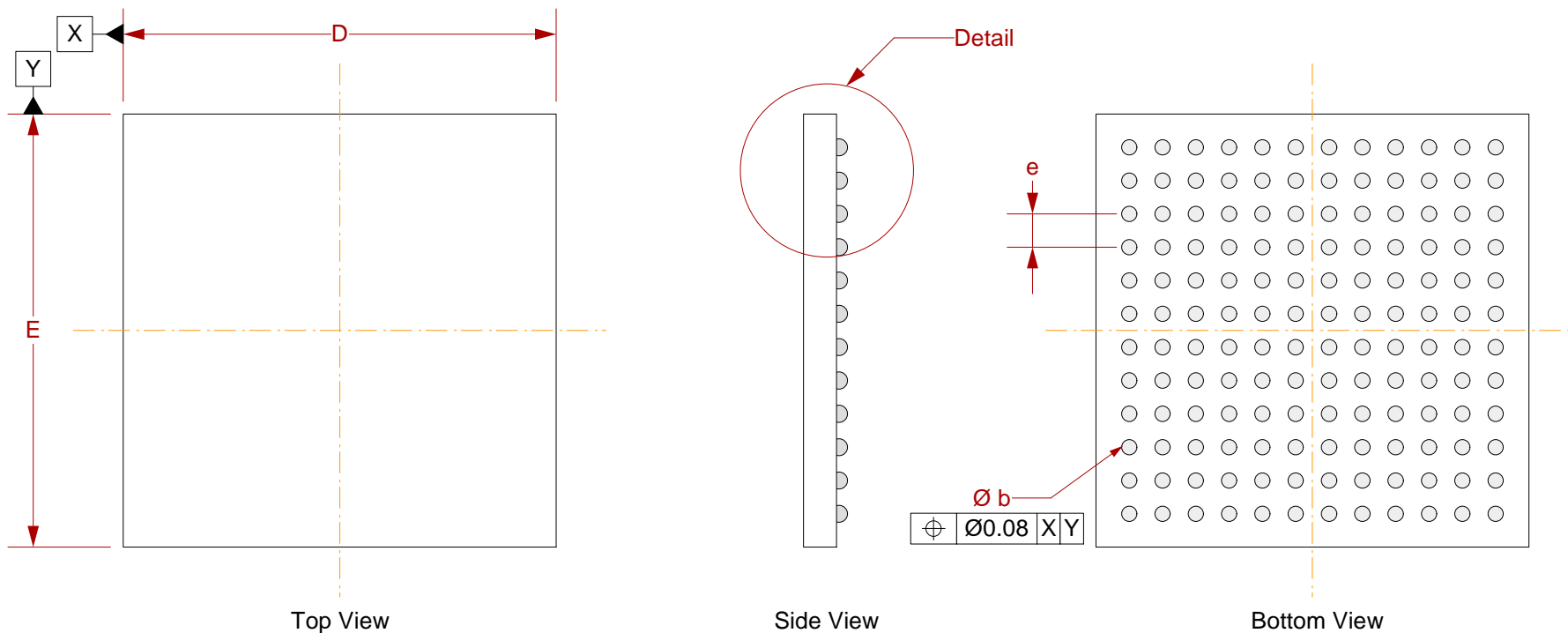
**Target PCB Recommendations**

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: ±0.025mm [±0.001"] unless stated otherwise.

	<b>SG-BGA-8005 Drawing</b> © 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Status: Released	Scale: -	Rev: B	
		Drawing: J. Glab		Date: 7/30/07	
		File: SG-BGA-8005 Dwg		Modified: 6/12/09, AE	

Compatible BGA Spec




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.

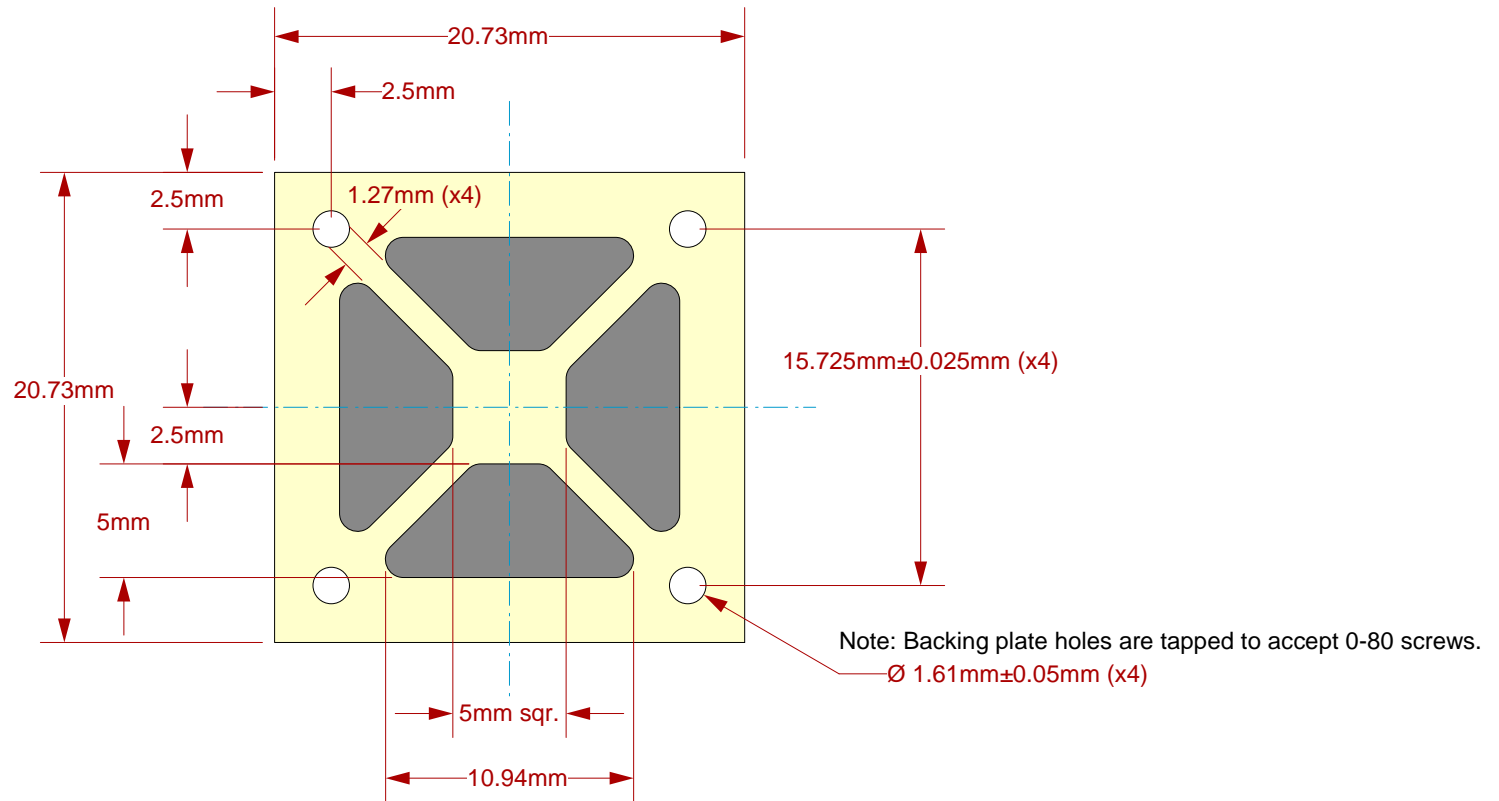
DIM	MIN	MAX
A	1.3	1.5
A1	0.31	0.41
b		0.51
D	13.0 BSC	
E	13.0 BSC	
e	1 BSC	

12 x 12 array

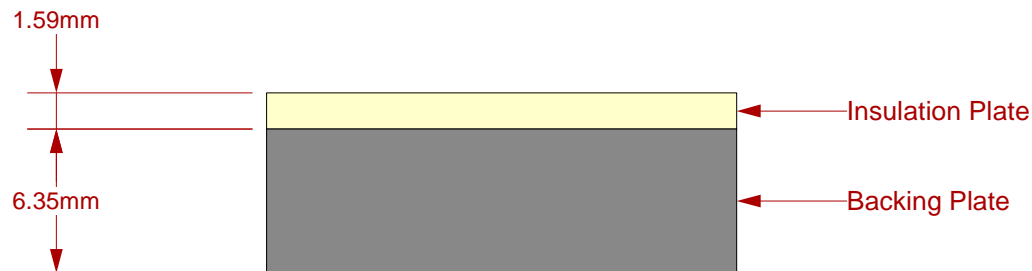
All dimensions are in mm unless stated otherwise

	<b>SG-BGA-8005 Drawing</b>	Status: Released	Scale: -	Rev: B
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab		Date: 7/30/07
		File: SG-BGA-8005 Dwg	Modified: 6/12/09, AE	


Top View



Side View



Description: Insulation Plate and Backing Plate

	<b>SG-BGA-8005 Drawing</b>	Status: Released	Scale: -	Rev: B
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab		Date: 7/30/07
		File: SG-BGA-8005 Dwg		Modified: 6/12/09, AE

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