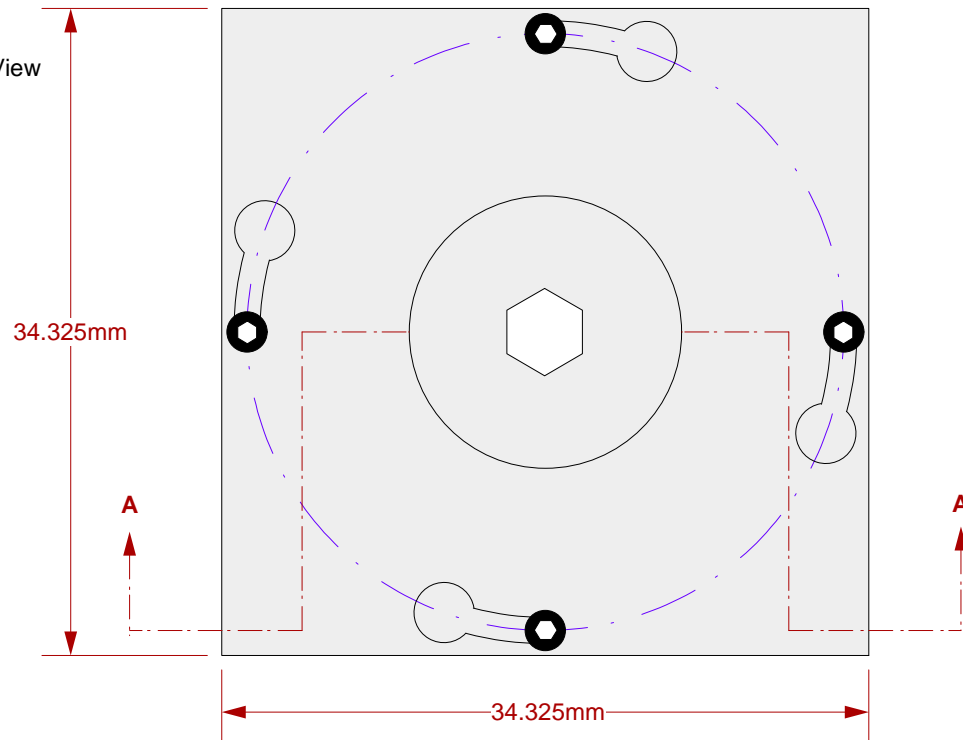


# GHz BGA Socket - Direct mount, solderless

Top View



## Features

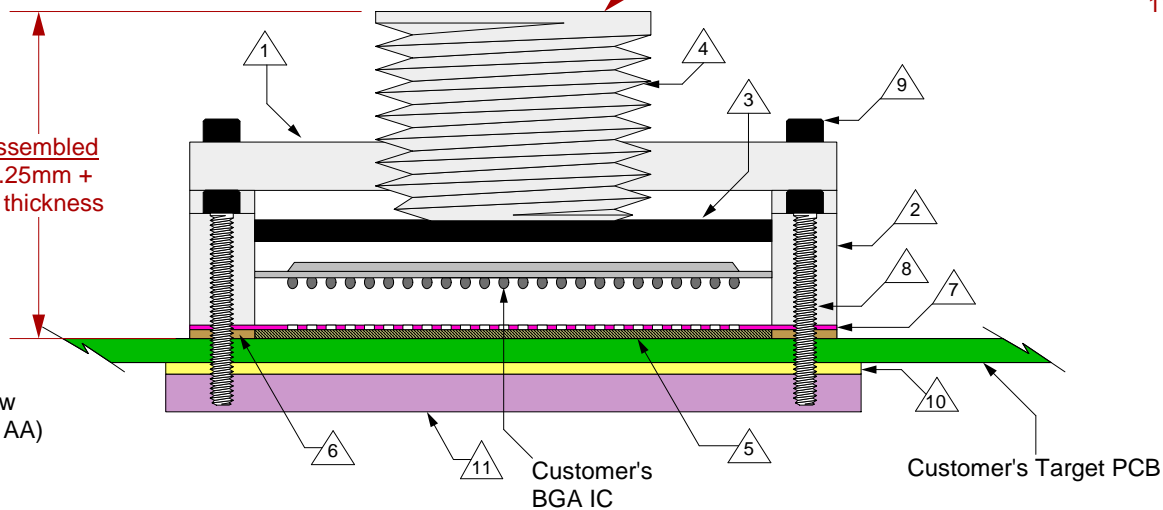
- Directly mounts to target PCB (needs tooling holes) with hardware.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid

- 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- 2 Socket base: Black anodized Aluminum. Thickness = 6.5mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- 4 Compression screw: Clear 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: Cirlex or equivalent. 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, 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.

Recommended torque = 7 in lbs./  
112 in oz.

Assembled  
8.25mm +  
IC thickness

Side View  
(Section AA)



## SG-BGA-6022 Drawing

Status: Released

Scale: NA

Rev: F



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11351 Rupp Drive, Suite 400, Burnsville, MN 55337  
Tele: (952) 229-8200  
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Drawing: H. Hansen

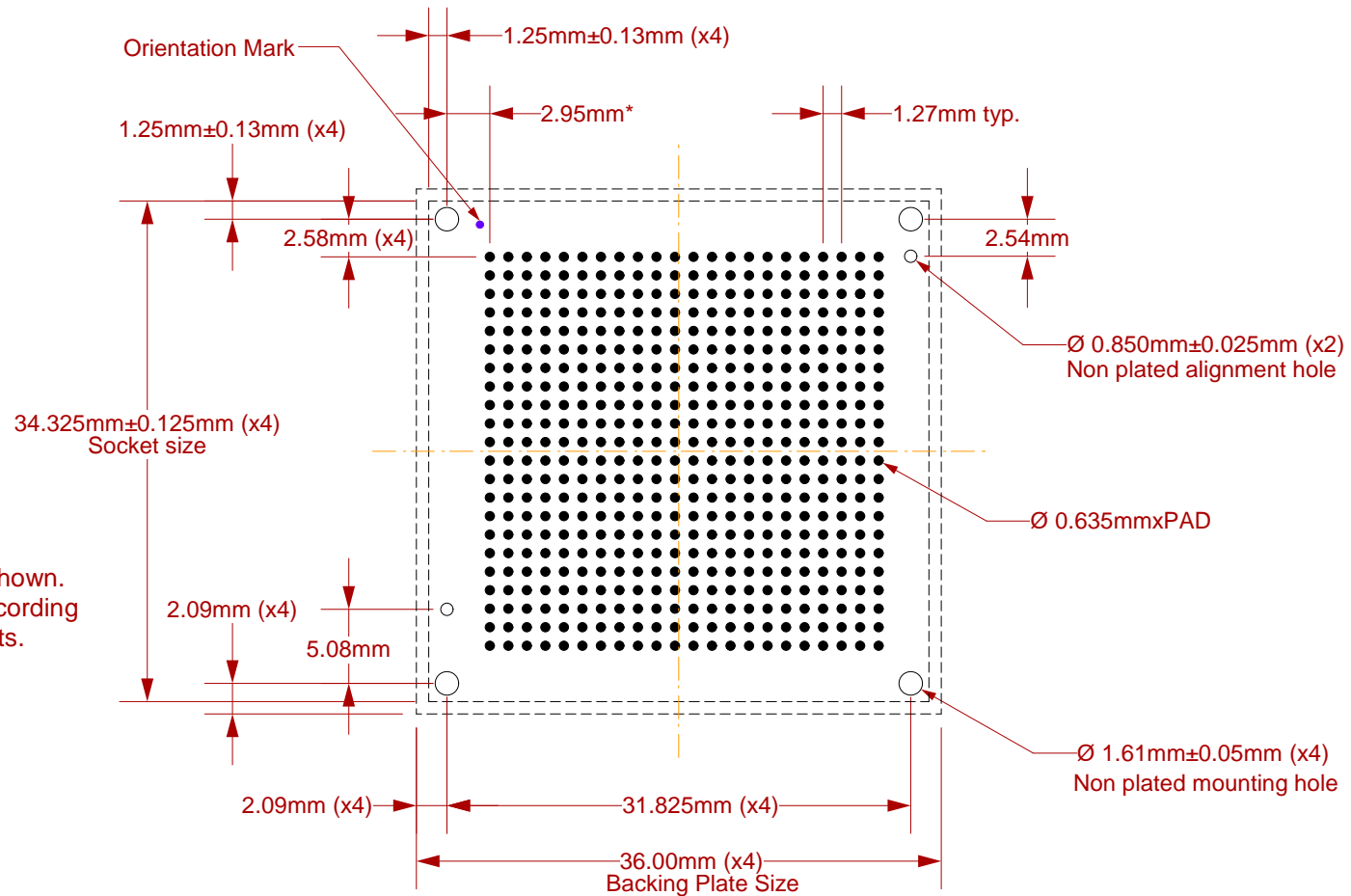
Date: 11/26/01

File: SG-BGA-6022 Dwg

Modified: 7/16/09, AE

All tolerances:  $\pm 0.125\text{mm}$  (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.

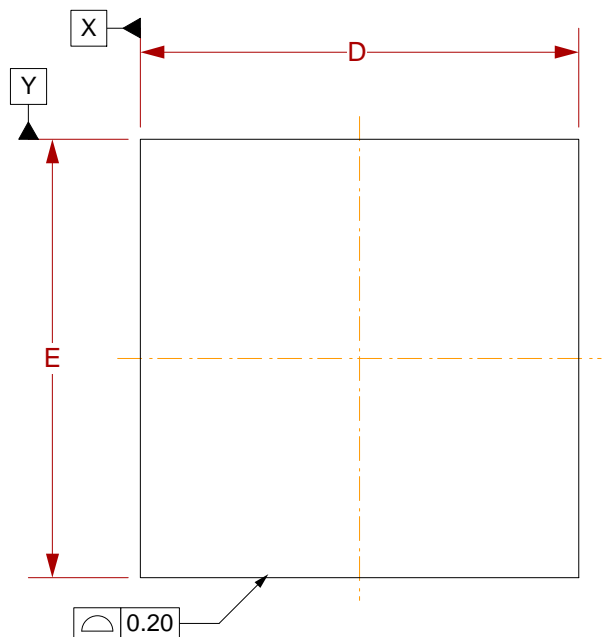
Target PCB Recommendations

Total thickness: 3.175mm min.  
Plating: Gold or Solder finish  
PCB Pad height: Same or higher than solder mask

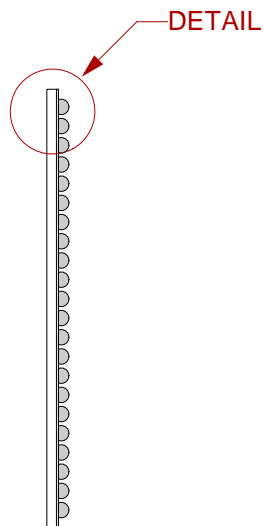
NOTE: Steel backing plate may be required based on end user's application

Recommended PCB Layout Tolerances:  $\pm 0.025\text{mm}$  [ $\pm 0.001''$ ] unless stated otherwise.

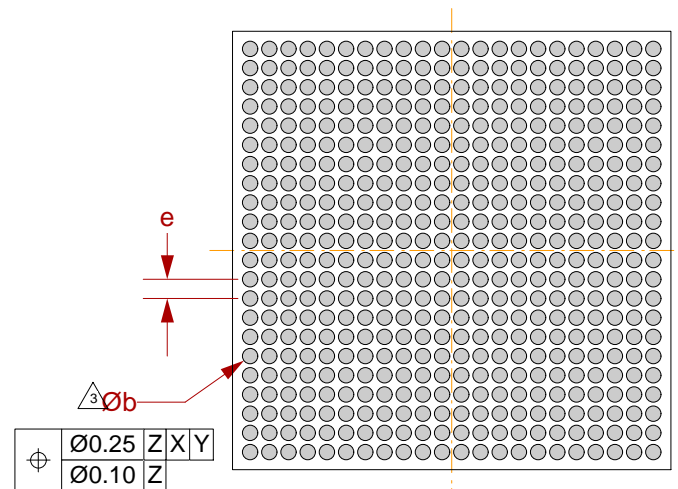
<b>SG-BGA-6022 Drawing</b>		Status: Released	Scale: 2:1	Rev: F
 © 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 11/26/01	
	File: SG-BGA-6022 Dwg		Modified: 7/16/09, AE	



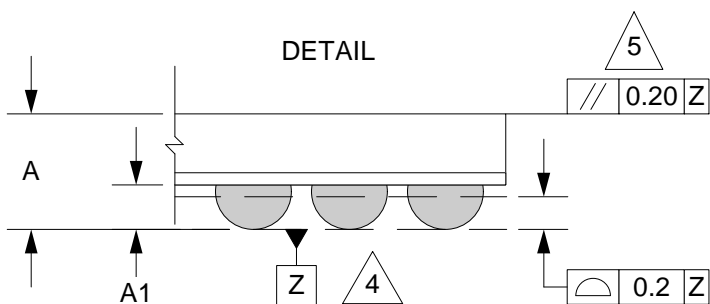
TOP VIEW



SIDE VIEW




BOTTOM VIEW



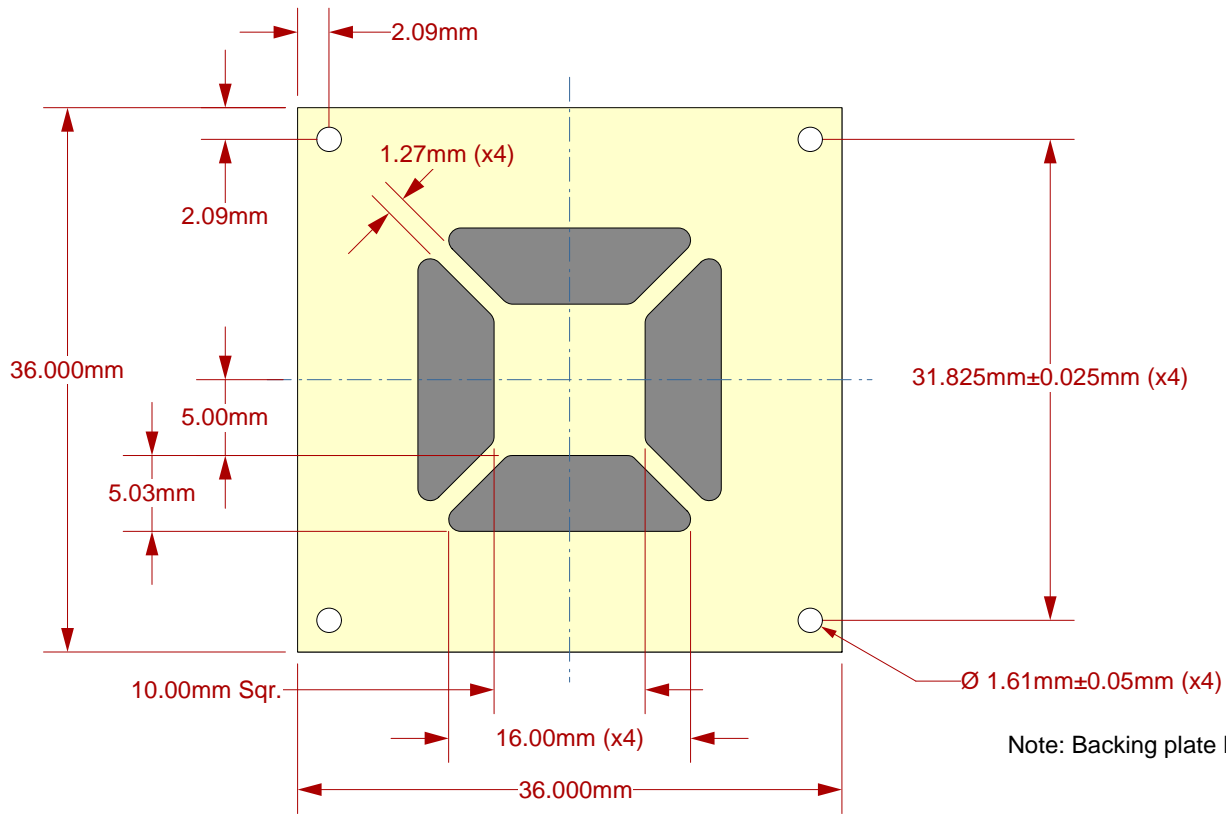
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

DIM	MIN	MAX
A		3.82
A1	0.74	0.94
b		1.0
D	29.0 BSC	
E	29.0 BSC	
e	1.27 BSC	

Array 22x22

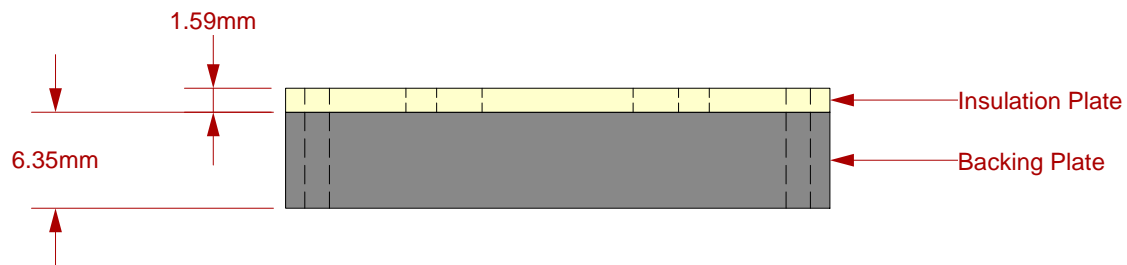
 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6022 Drawing</b></p>	<p>Status: Released</p>	<p>Scale: 2:1</p>	<p>Rev: F</p>
	<p>Drawing: H. Hansen</p>	<p>Date: 11/26/01</p>		
	<p>File: SG-BGA-6022 Dwg</p>	<p>Modified: 7/16/09, AE</p>		

Top View




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

Side View



Description: Backing Plate

	<b>SG-BGA-6022 Drawing</b>	Status: Released	Scale: 2:1	Rev: F
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		File: SG-BGA-6022 Dwg	Modified: 7/16/09, AE	

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