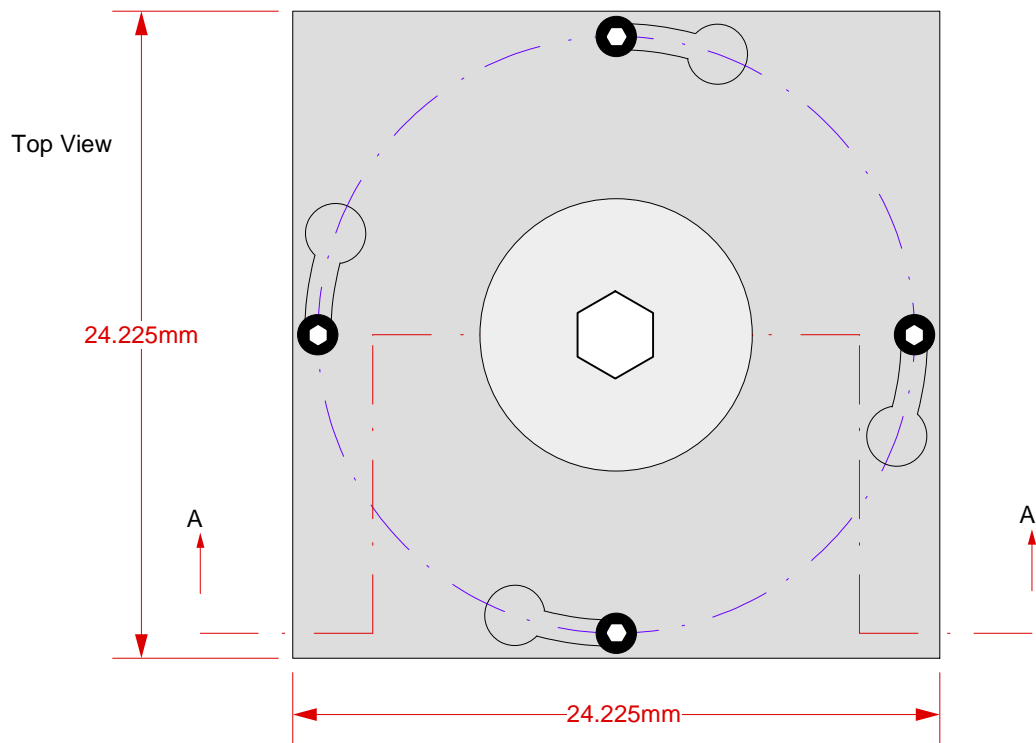


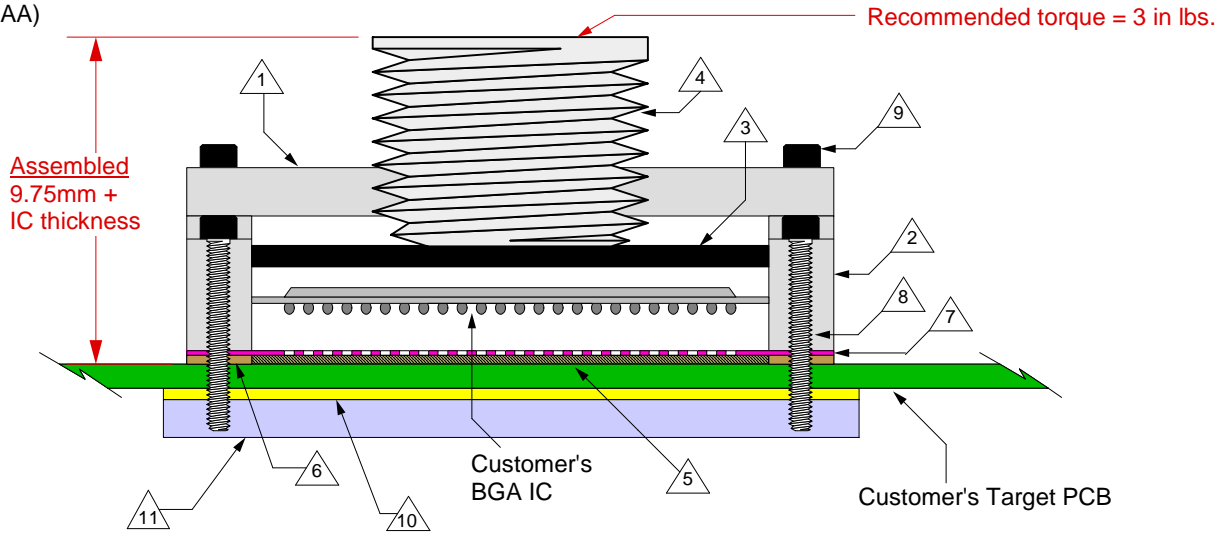
# GHz BGA Socket - Direct mount, solderless

## 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
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



Side View  
(Section AA)



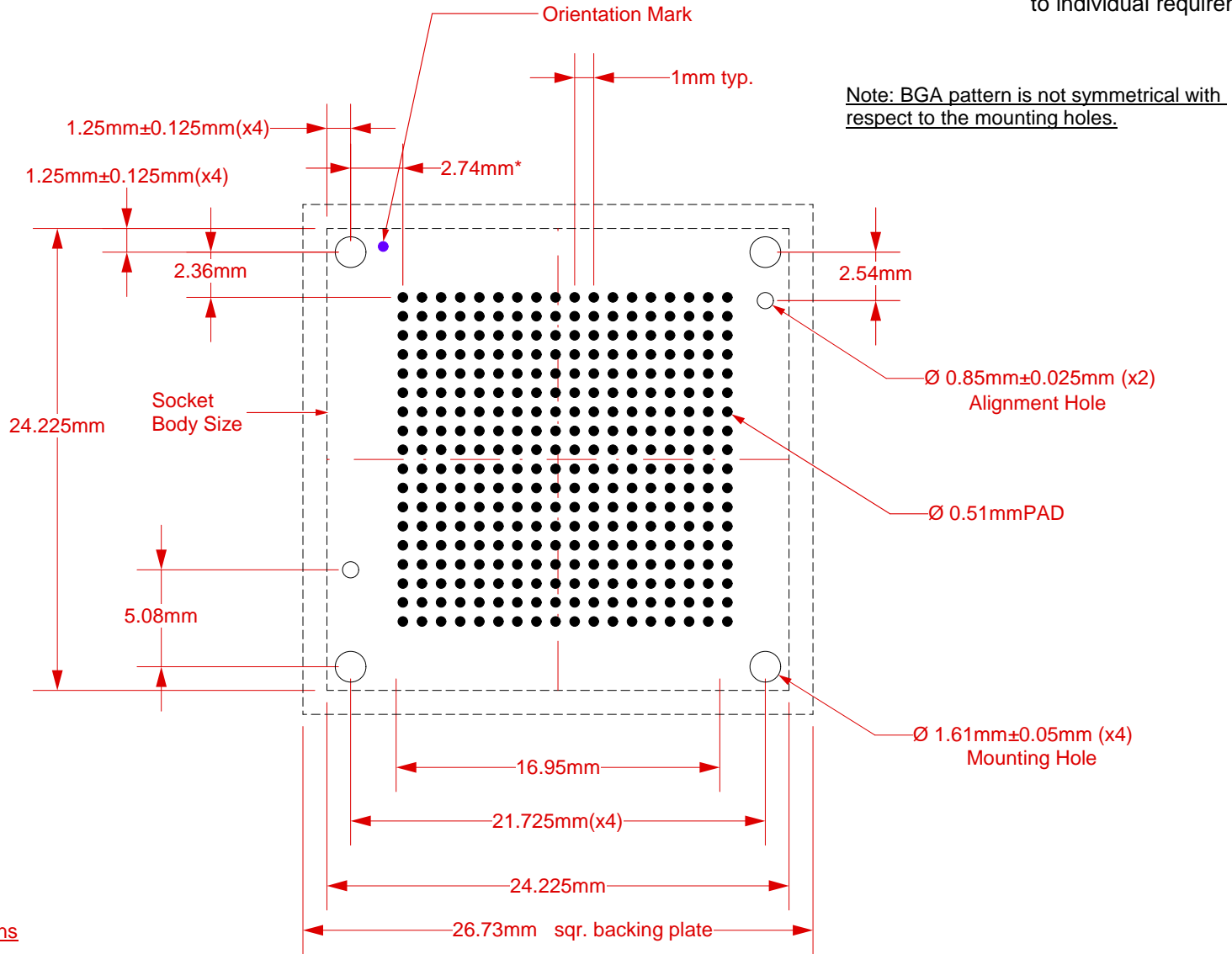
- △ 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- △ 2 Socket base: Black anodized Aluminum. Thickness = 6.5mm.
- △ 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- △ 4 Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
- △ 5 Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
- △ 6 Elastomer Guide: 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, 1.59mm thick.
- △ 11 Backing Plate: Anodized Aluminum 6.35mm thick.

	<b>SG-BGA-6025 Drawing</b>	Status: Released	Scale: -	Rev: G
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 11/27/01
		File: SG-BGA-6025 Dwg.mcd	Modified: 7/16/09, AE	

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

Recommended PCB Layout  
Top View

Note: Full BGA pattern shown.  
 Please adjust pattern according to individual requirements.




Target PCB Recommendations

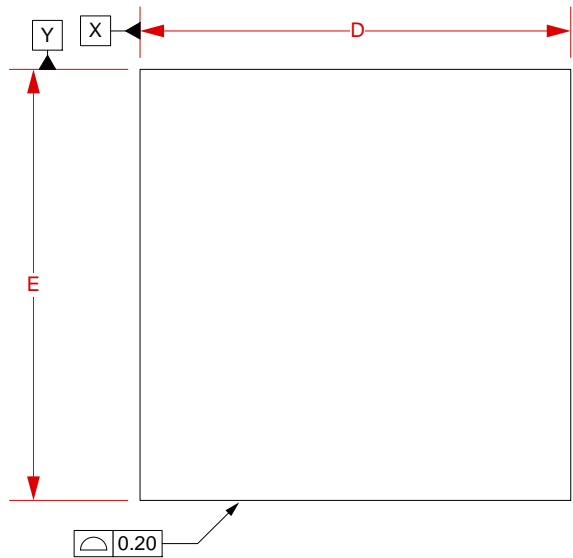
Total thickness: 1.6mm min.  
 Plating: Gold or Solder finish  
 PCB Pad height: Same or higher than solder mask

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

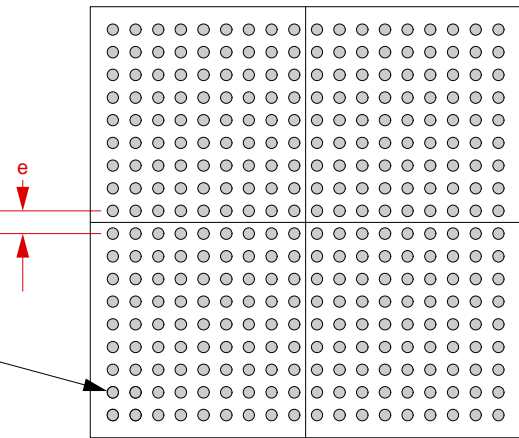
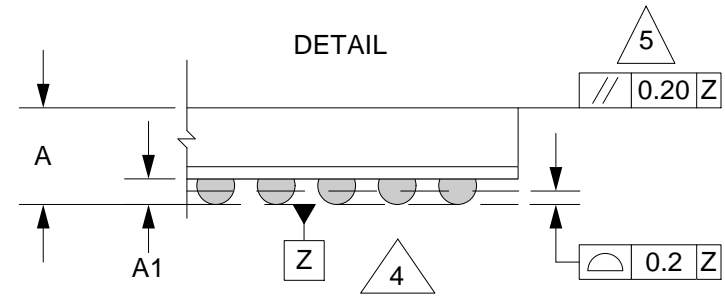
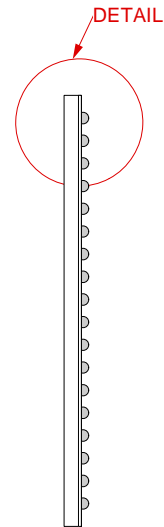
Recommended PCB Layout Tolerances:  $\pm 0.025\text{mm}$  [ $\pm 0.001''$ ] unless stated otherwise.

<b>SG-BGA-6025 Drawing</b>		Status: Released	Scale: -	Rev: G
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	File: SG-BGA-6025 Dwg.mcd		Modified: 7/16/09, AE	

TOP VIEW



SIDE VIEW




BOTTOM VIEW

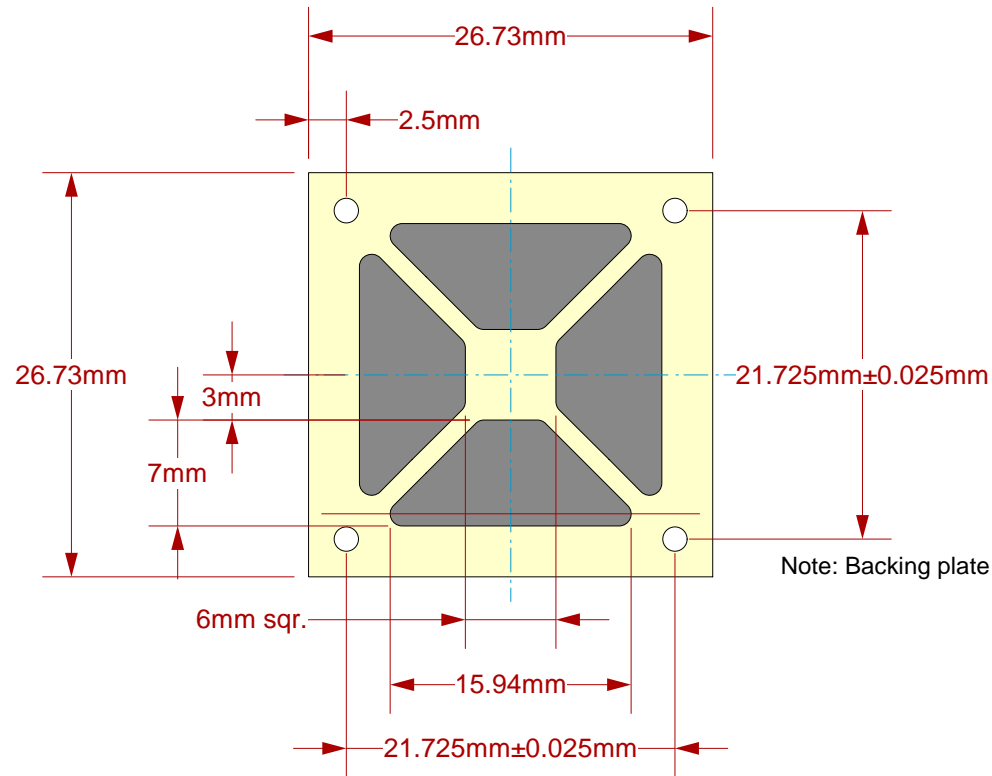
1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
  - 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
  - 5. Parallelism measurement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

DIM	MIN	MAX
A		3.5
A1	0.3	0.5
b		0.70
D	19.00 BSC	
E	19.00 BSC	
e	1.0 BSC	

Array: 18x18

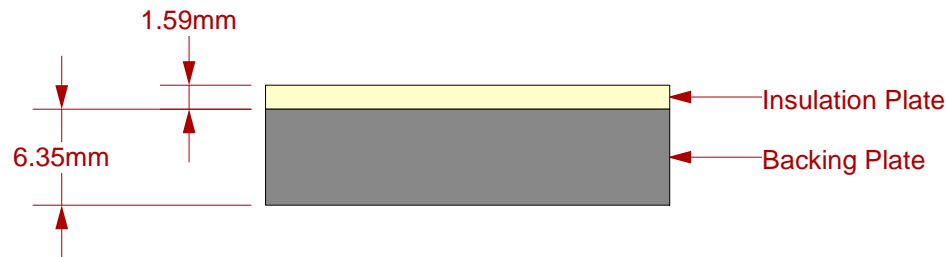
	<b>SG-BGA-6025 Drawing</b>	Status: Released	Scale: -	Rev: G
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Top View




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

Side View



Description: Backing Plate with Insulation Plate

	<b>SG-BGA-6025 Drawing</b>	Status: Released	Scale: -	Rev: G
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		File: SG-BGA-6025 Dwg.mcd	Modified: 7/16/09, AE	

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