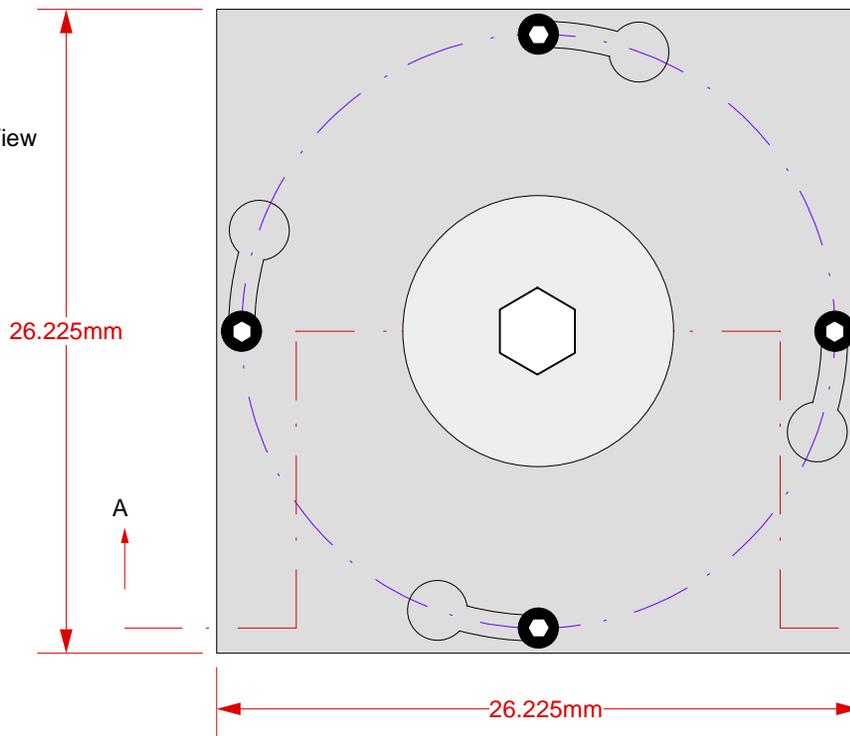


# GHz BGA Socket - Direct mount, solderless

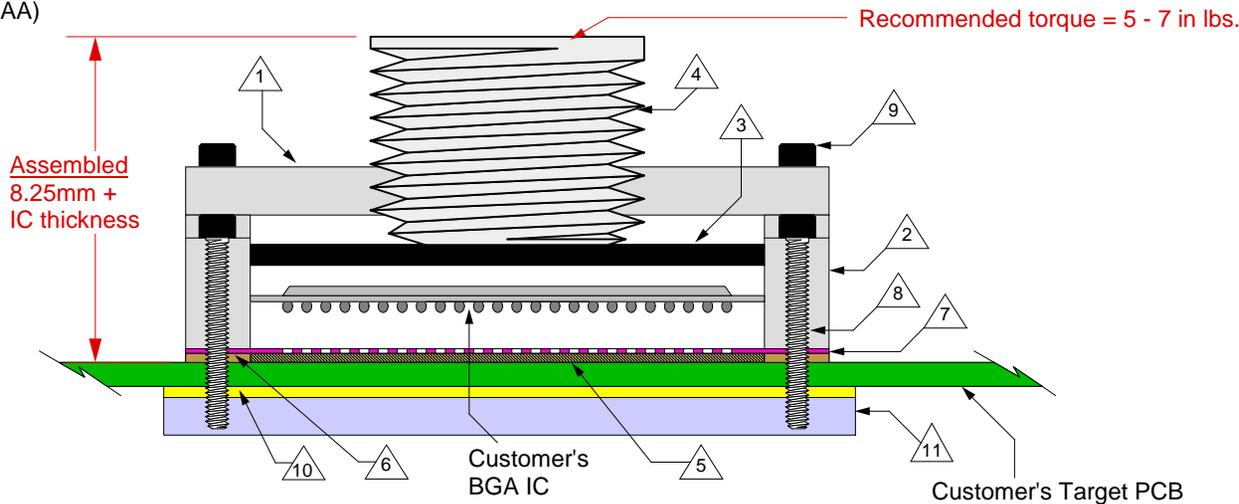
## Features

- 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

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: 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, 9.525mm 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-6052 Drawing

© 2009 IRONWOOD ELECTRONICS, INC.  
11351 Rupp Dr. Suite 400, Burnsville MN 55337  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: D

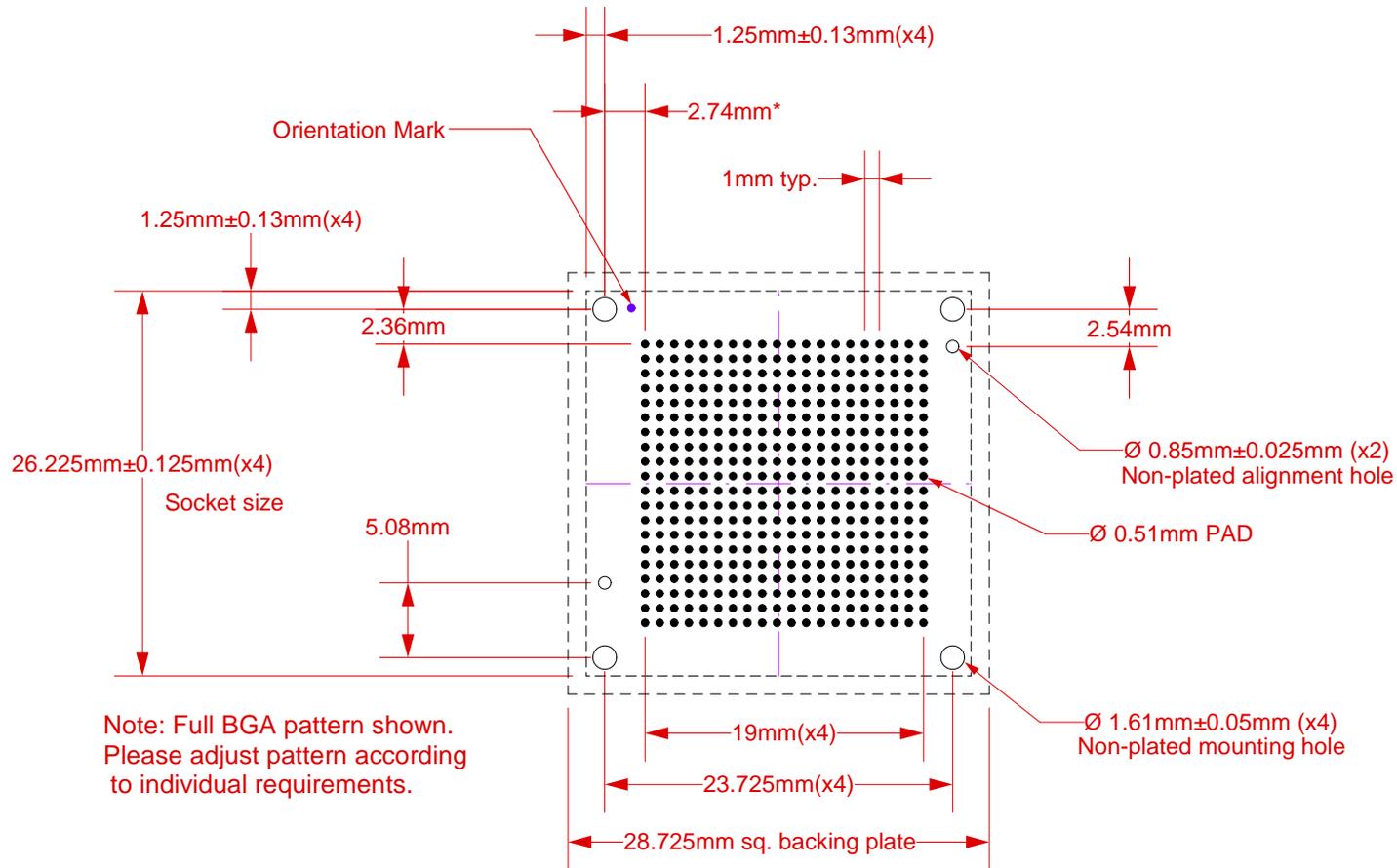
Drawing: H. Hansen

Date: 8/13/02

File: SG-BGA-6052 Dwg.mcd

Modified: 7/8/09, AE

All tolerances:  $\pm 0.125\text{mm}$  (unless stated otherwise). Materials and specifications are subject to change without notice.



Target PCB Recommendations

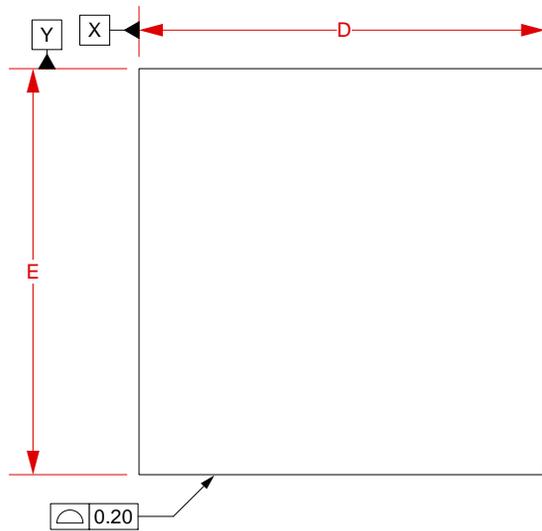
Total thickness: 1.6mm min.  
Plating: Gold or Solder finish  
PCB Pad height: Same or higher than solder mask

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

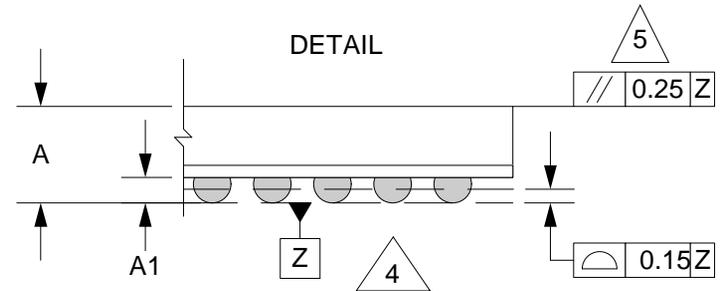
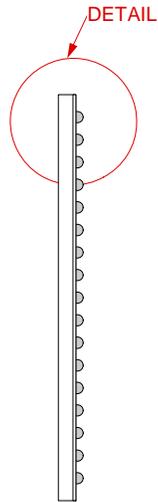
Recommended PCB Layout Tolerances:  $\pm 0.025\text{mm}$  [ $\pm 0.001''$ ] unless stated otherwise.

 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6052 Drawing</b></p>	<p>Status: Released</p>	<p>Scale: 2:1</p>	<p>Rev: D</p>
	<p>Drawing: H. Hansen</p>	<p>Date: 8/13/02</p>		
	<p>File: SG-BGA-6052 Dwg.mcd</p>	<p>Modified: 7/8/09, AE</p>		

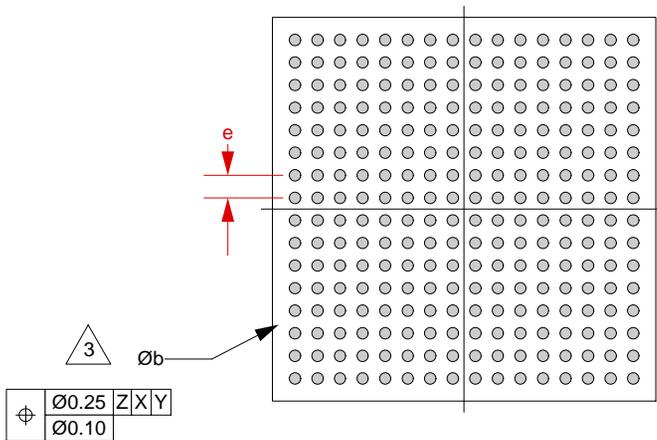
TOP VIEW  
(Reference Only)



SIDE VIEW  
(Reference Only)



BOTTOM VIEW  
(Reference Only)



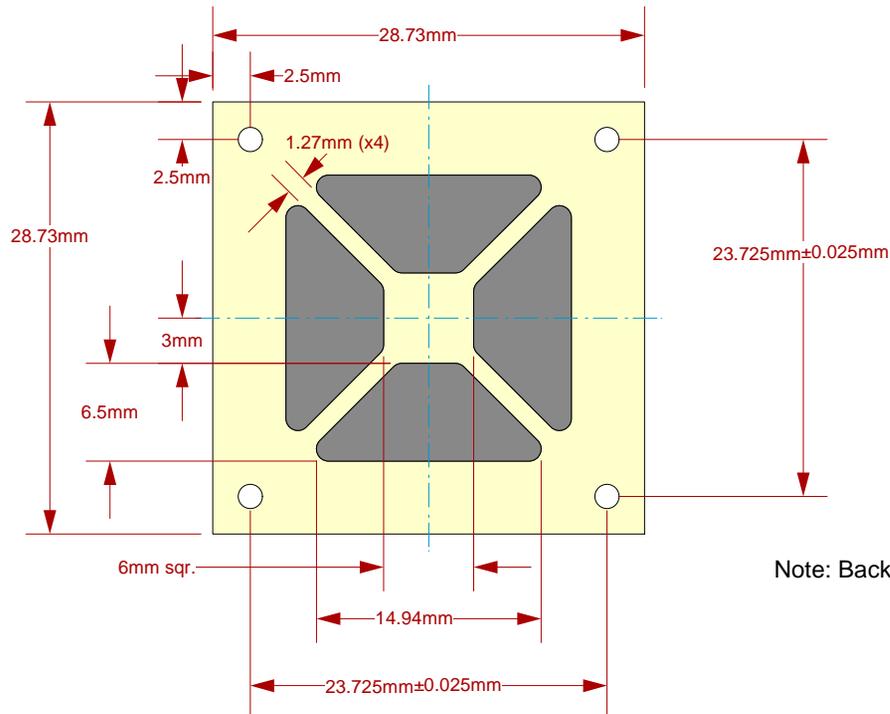
1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
  - 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
  - 5. Parallelism measurement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

DIM	MIN	MAX
A		1.74
A1	0.45	0.55
b		0.63
D	21.00 BSC	
E	21.00 BSC	
e	1.0 BSC	

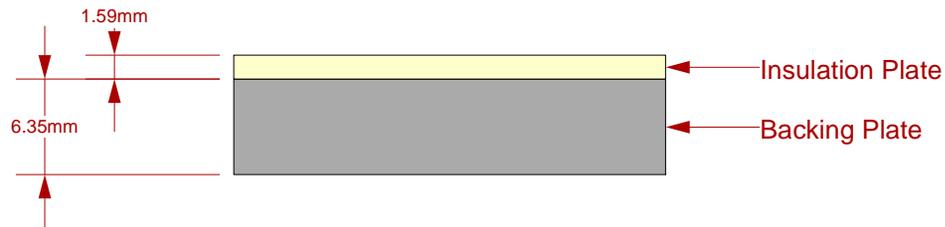
Array 20x20

	<b>SG-BGA-6052 Drawing</b>	Status: Released	Scale: -	Rev: D
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 8/13/02
		File: SG-BGA-6052 Dwg.mcd	Modified: 7/8/09, AE	

Top View



Side View



Description: Backing Plate with Insulation Plate

	<b>SG-BGA-6052 Drawing</b>	Status: Released	Scale: -	Rev: D
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		File: SG-BGA-6052 Dwg.mcd	Modified: 7/8/09, AE	

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