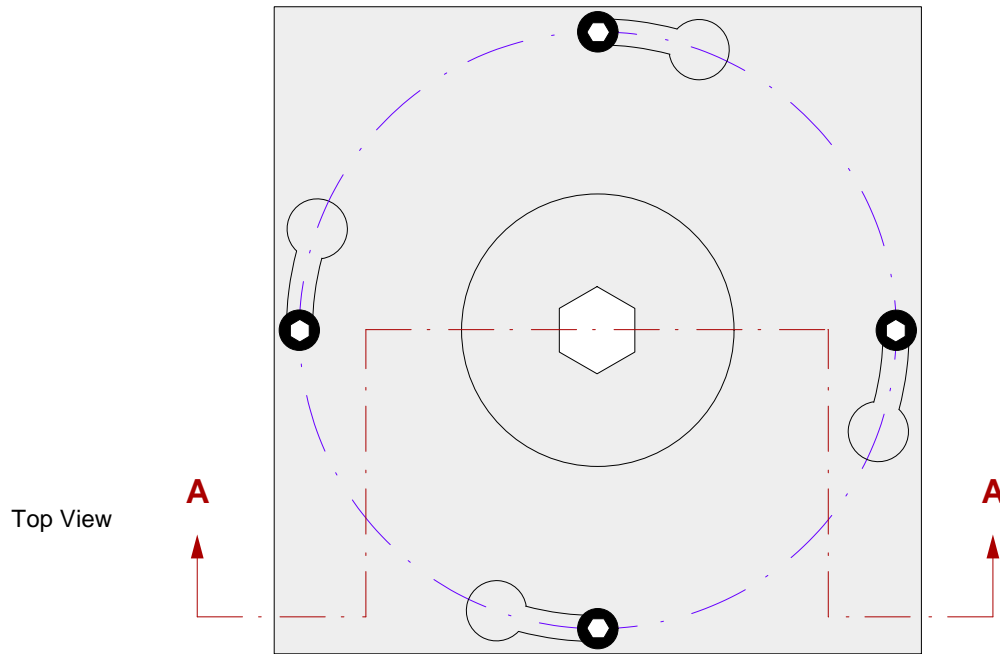


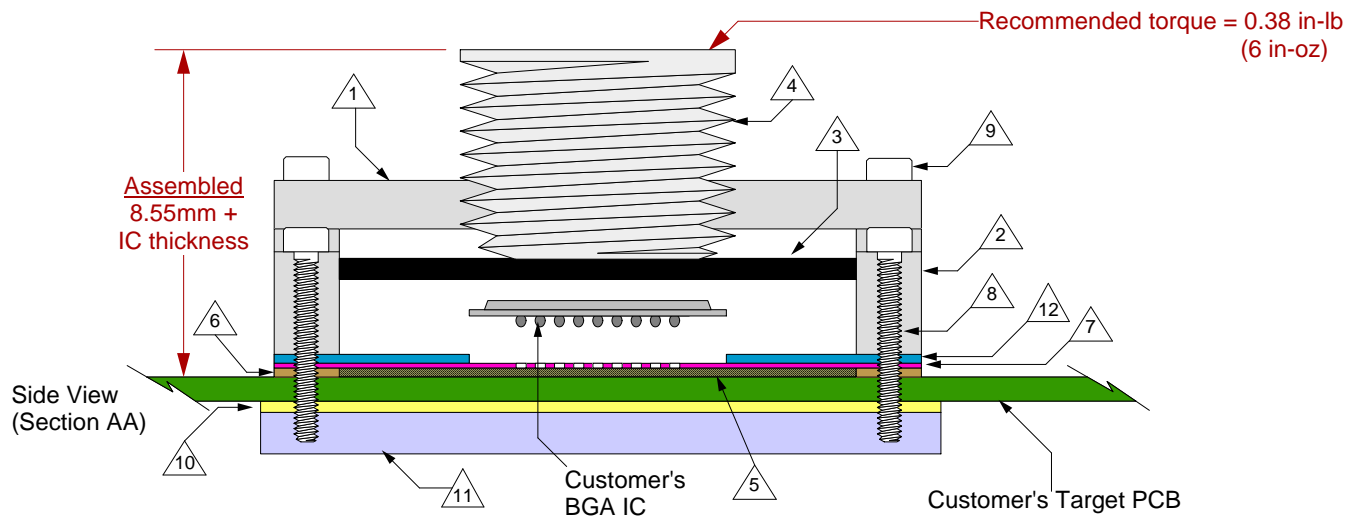
GHz BGA Socket - Direct mount, solderless

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



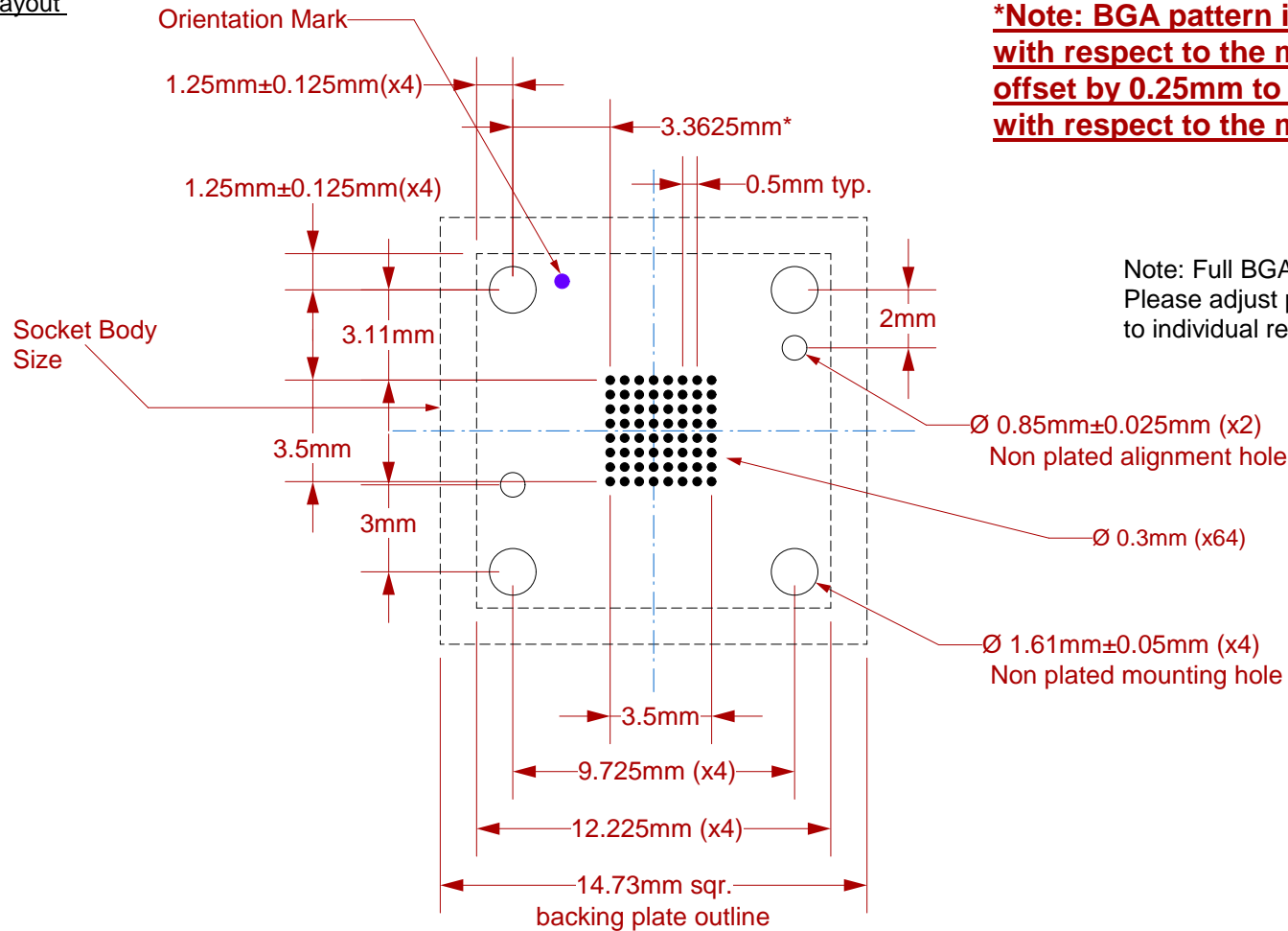
Side View (Section AA)

- △ 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 , 12.7mm long.
- △ 9 Socket lid screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread , 4.76mm long.
- △ 10 Insulation Plate: FR4/G10, Thickness = 1.59mm.
- △ 11 Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.
- △ 12 IC Guide: FR4/G10

	SG-BGA-7154 Drawing	Status: Released	Scale: -	Rev: A
	© 2009 IRONWOOD ELECTRONICS, INC. 11351, Rupp Dr., Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: M.A. Fedde		Date: 11/5/09
		File: SG-BGA-7154 Dwg	Modified:	

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. It is offset by 0.25mm to the right of center with respect to the mounting holes.**


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

Target PCB Recommendations

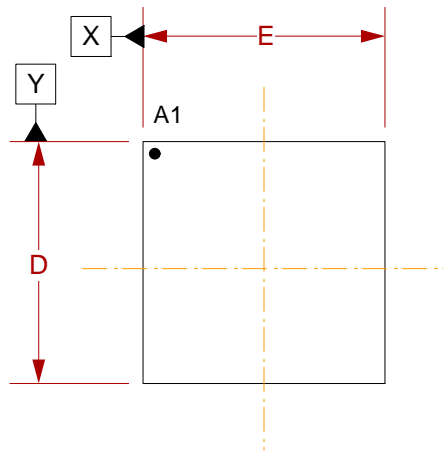
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

All dimensions are in mm unless stated otherwise

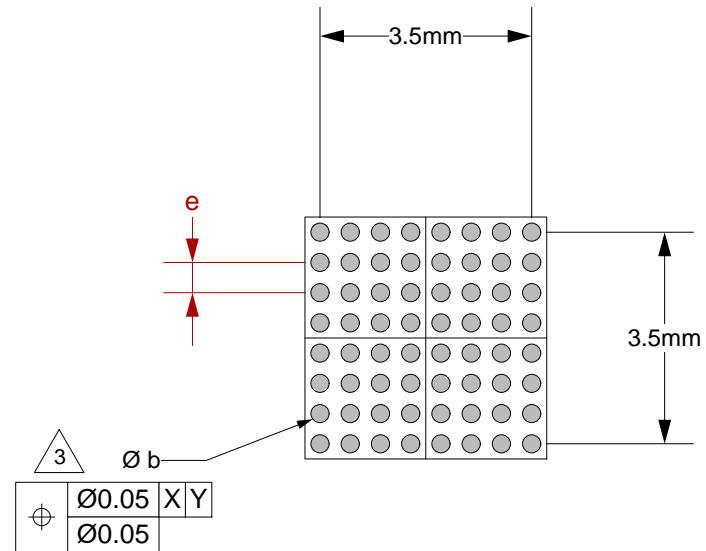
Recommended PCB Layout Tolerances: $\pm 0.025\text{mm}$ [$\pm 0.001''$] unless stated otherwise.

	SG-BGA-7154 Drawing		Status: Released	Scale: 4:1	Rev: A	
	© 2009 IRONWOOD ELECTRONICS, INC. 11351, Rupp Dr., Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com			Drawing: M.A. Fedde		Date: 11/5/09
				File: SG-BGA-7154 Dwg		Modified:

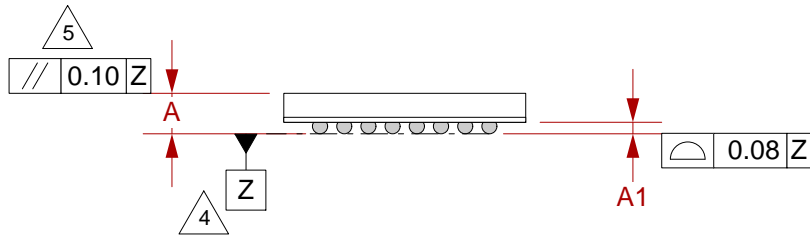
Compatible BGA Spec



Top View



Bottom View



End 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.

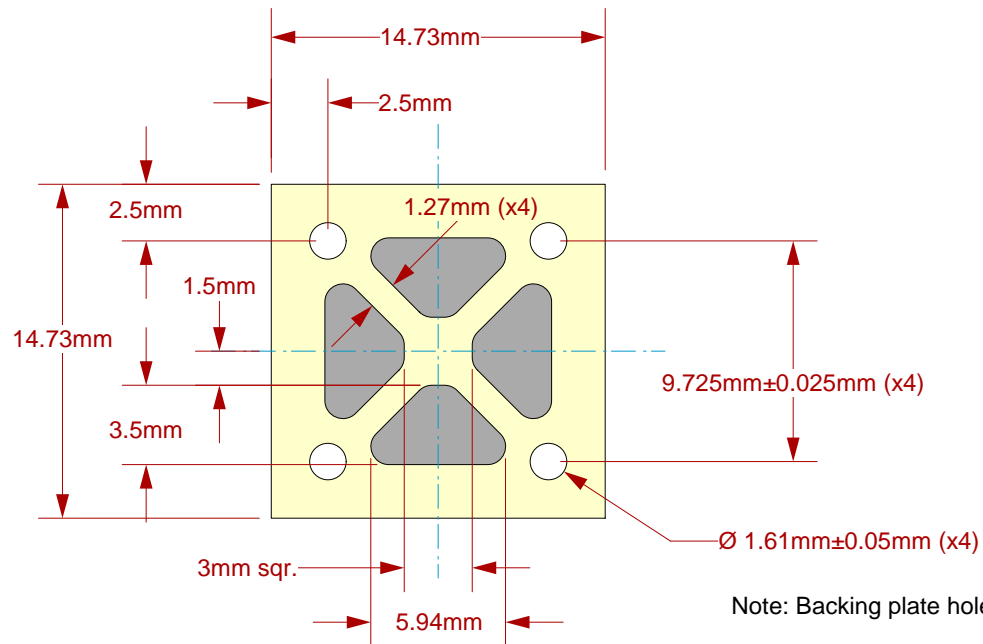
DIM	MIN	MAX
A		0.8
A1	0.15	
b	0.25	0.35
D	4.0 BSC	
E	4.0 BSC	
e	0.5 BSC	

8x8 array

All dimensions are in mm unless stated otherwise

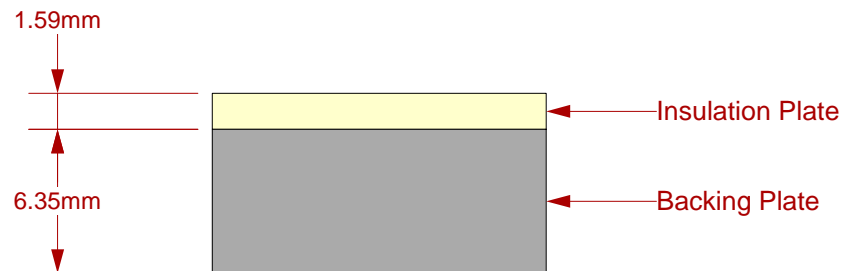
 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351, Rupp Dr., Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p>SG-BGA-7154 Drawing</p>	<p>Status: Released</p>	<p>Scale: -</p>	<p>Rev: A</p>
	<p>Drawing: M.A. Fedde</p>	<p>Date: 11/5/09</p>	<p>File: SG-BGA-7154 Dwg</p>	<p>Modified:</p>

Top View




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

Side View



Description: Insulation Plate and Backing Plate

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

SG-BGA-7154 Drawing		Status: Released	Scale: -	Rev: A
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			Date: 11/5/09	
			File: SG-BGA-7154 Dwg	
			Modified:	