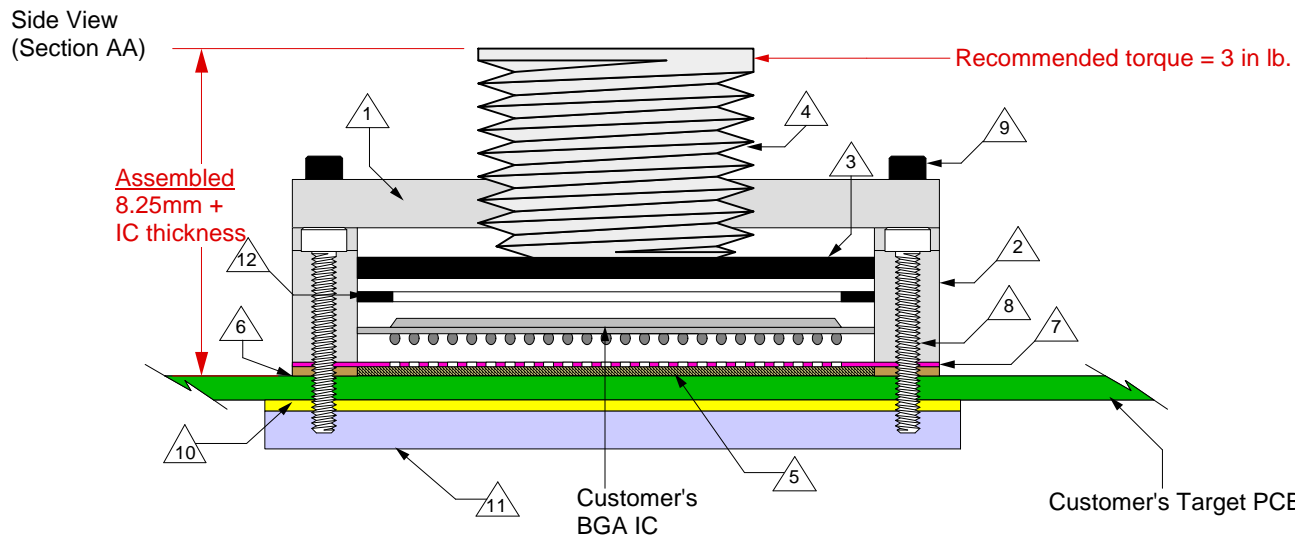


# GHz BGA Socket - Direct mount, solderless

## 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



- △ 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 = 0.745mm.
- △ 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. Thickness: 1.59mm
- △ 11 Backing plate: Black anodized Aluminum. Thickness = 6.3mm.
- △ 12 IC Frame: Kapton or equivalent.

### SG-BGA-6219-D4241 Drawing

Status: Released

Scale: -

Rev: A

Drawing: S. Huang

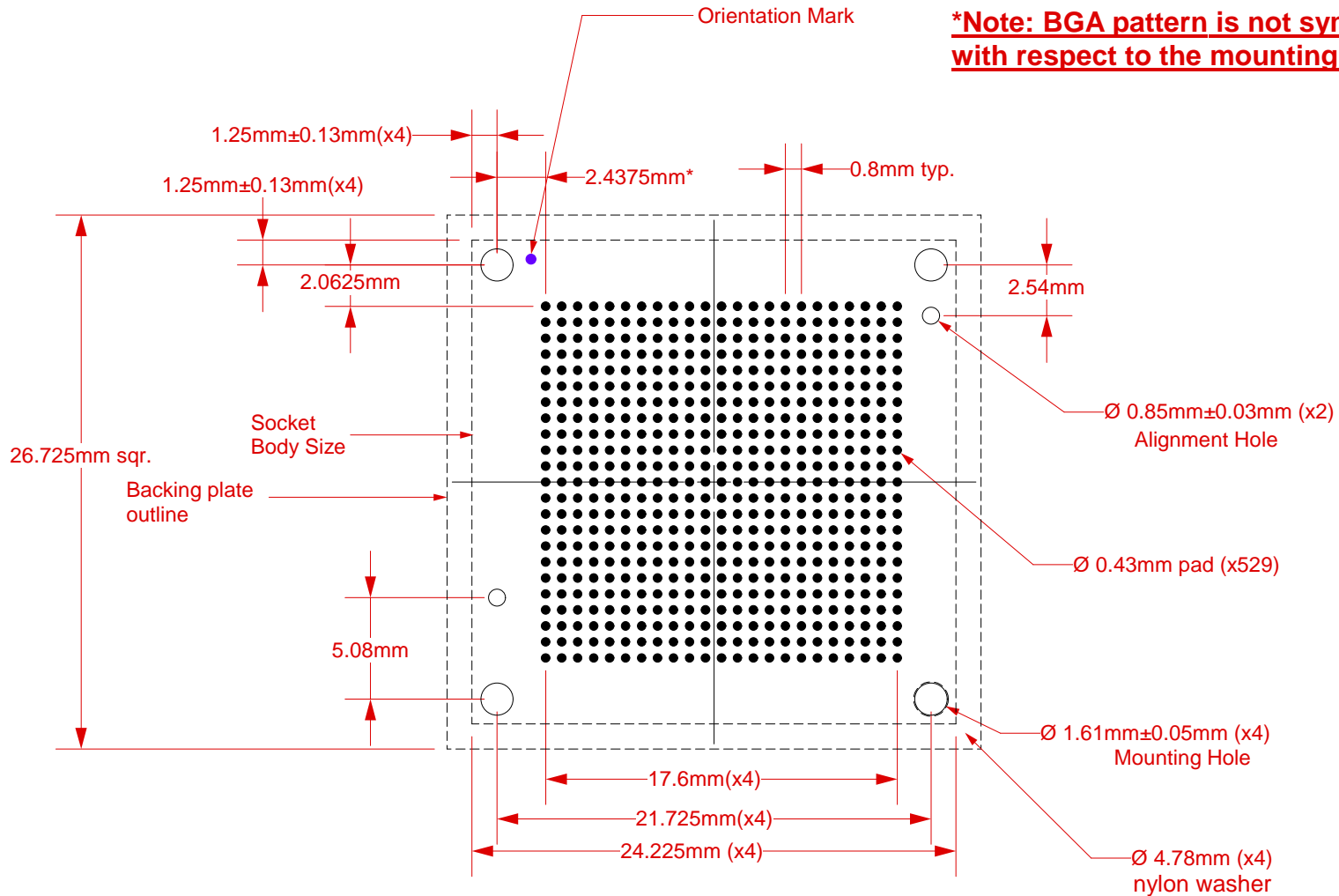
Date: 10/11/11

File: SG-BGA-6219-D4241 Dwg

Modified:

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






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

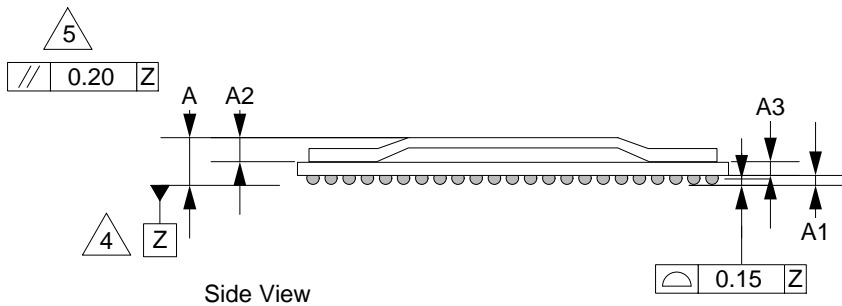
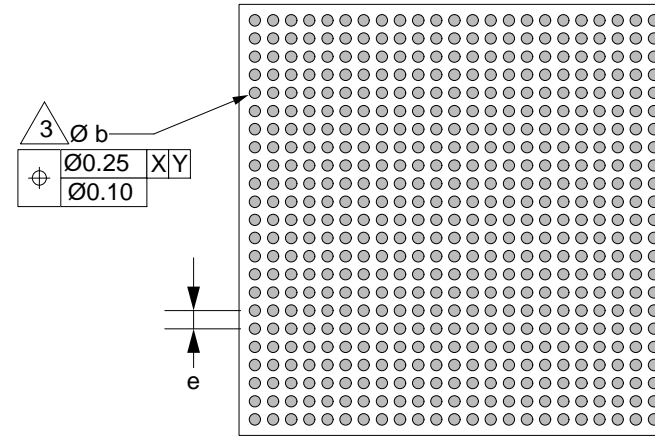
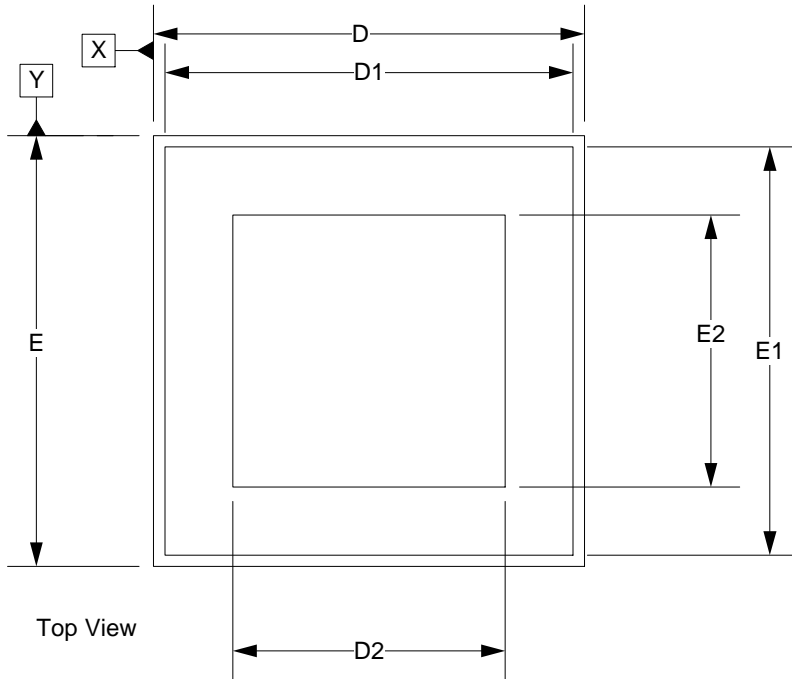
Target PCB Recommendations

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

NOTE: 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>© 2011 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p>SG-BGA-6219-D4214 Drawing</p>		<p>Status: Released</p>	<p>Scale: 3:1</p>	<p>Rev: A</p>
	<p>Drawing: S. Huang</p>		<p>Date: 10/11/11</p>		
	<p>File: SG-BGA-6219-D4214 Dwg</p>		<p>Modified:</p>		




1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

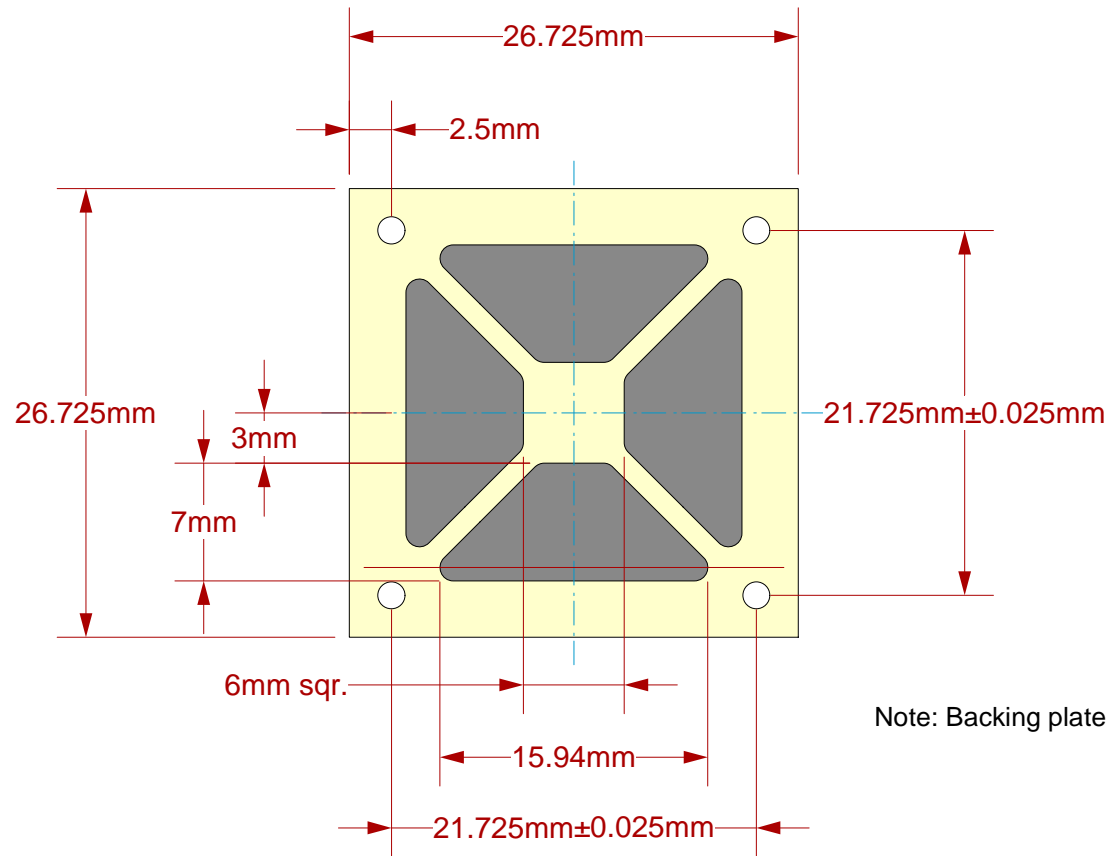
- 3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5. Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX
A		2.52
A1	0.35	
A2	1.02	1.22
A3		0.57
b	0.45	0.55
D	18.9	19.1
D1	18	
D2	12	
E	18.9	19.1
E1	18	
E2	12	
e	0.8 BSC	

Array: 23 X 23

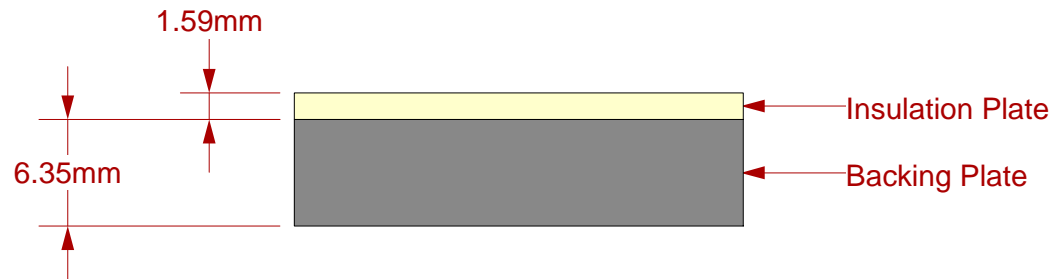
 <p>© 2011 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6219-D4241 Drawing</b></p>	<p>Status: Released</p>	<p>Scale: 3:1</p>	<p>Rev: A</p>
	<p>Drawing: S. Huang</p>	<p>Date: 10/11/11</p>		
	<p>File: SG-BGA-6219-D4241 Dwg</p>	<p>Modified:</p>		

Top View




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

Side View



Description: Insulation and backing plate.

	<b>SG-BGA-6219-D4241 Drawing</b>	Status: Released	Scale: 20:9	Rev: A
	© 2011 IRONWOOD ELECTRONICS, INC. Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: S. Huang		Date: 10/11/11
		File: SG-BGA-6219-D4241 Dwg	Modified:	

All tolerances are  $\pm 0.13\text{mm}$