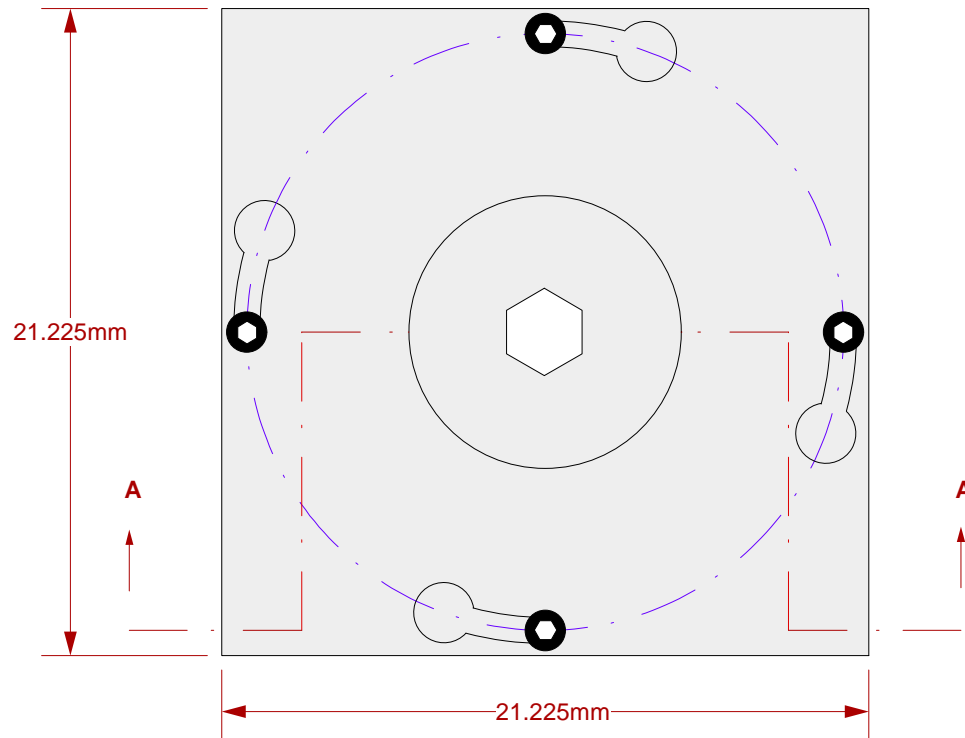


Top View

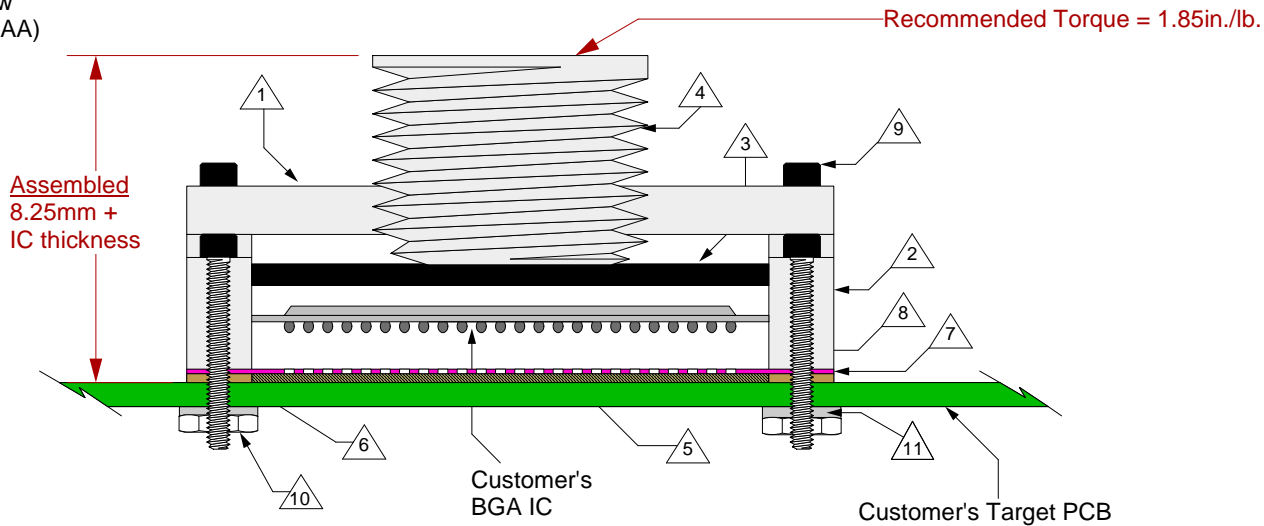


# GHz BGA Socket - Direct mount, solderless


## 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)



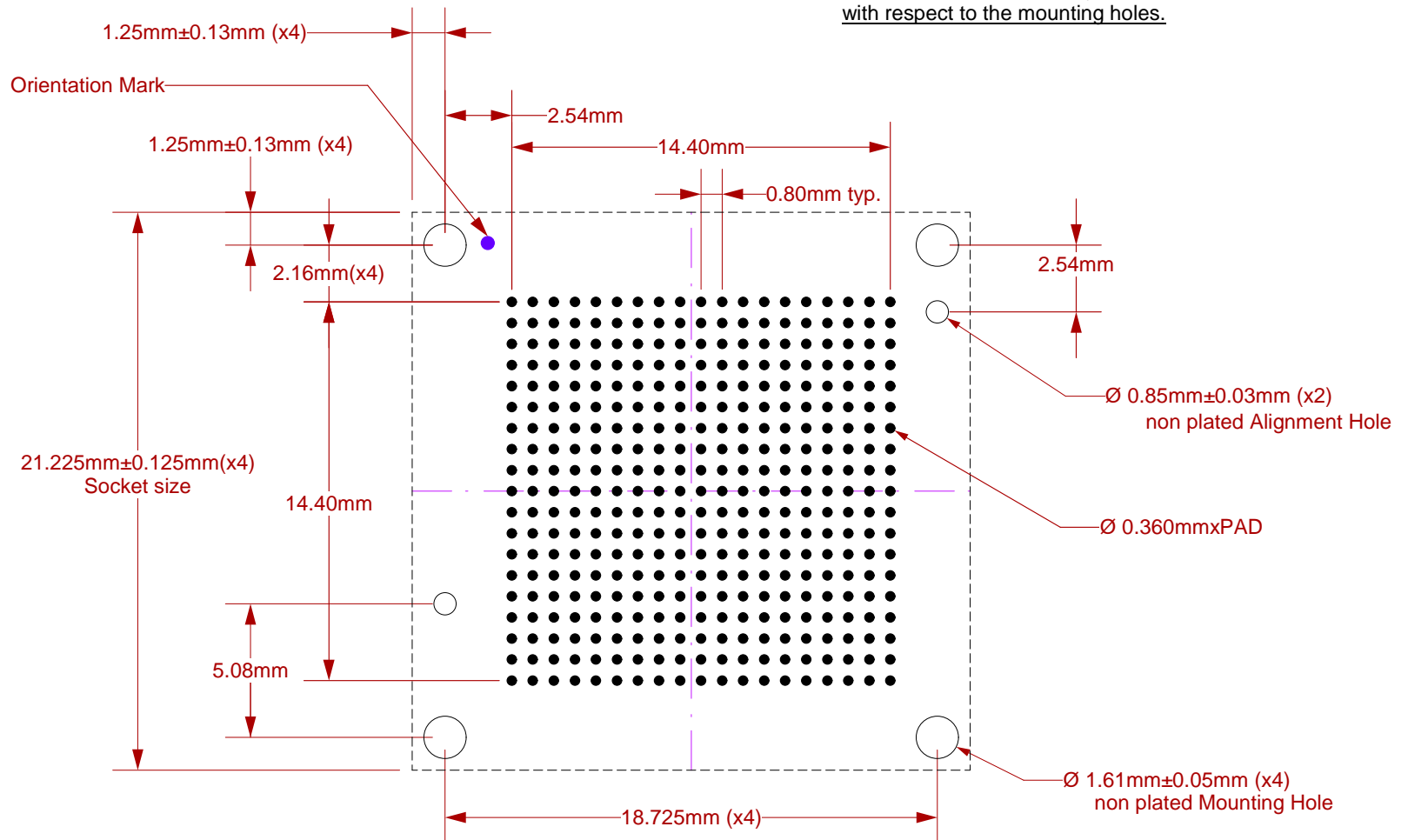
- 1 Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
- 2 Socket base: Black anodized Aluminum. Thickness = 5mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- 4 Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
- 5 Elastomer: 40 micron dia gold 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, 9.525mm long.
- 9 Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
- 10 Socket base nut: 18-8 Stainless steel, 0-80 fine thread.
- 11 Nylon washer: 1.73mm ID; 4.78mm OD, 0.64mm thick

	<b>SG-BGA-6033 Drawing</b>	Status: Released	Scale: NA	Rev: D
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 3/5/02
		File: SG-BGA-6033 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: BGA pattern is not symmetrical with respect to the mounting holes.




Target PCB Recommendations

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

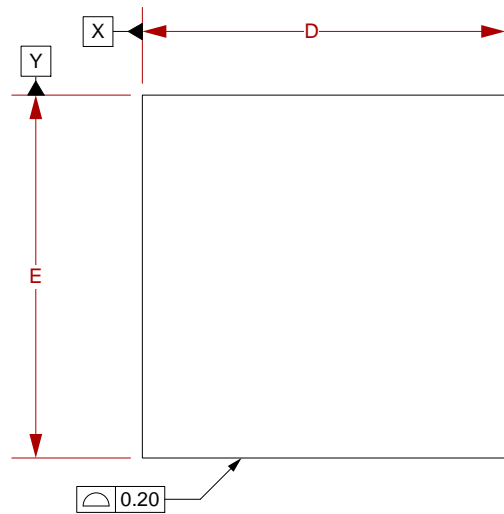
NOTE: Steel backing plate may be required based on end user's application

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

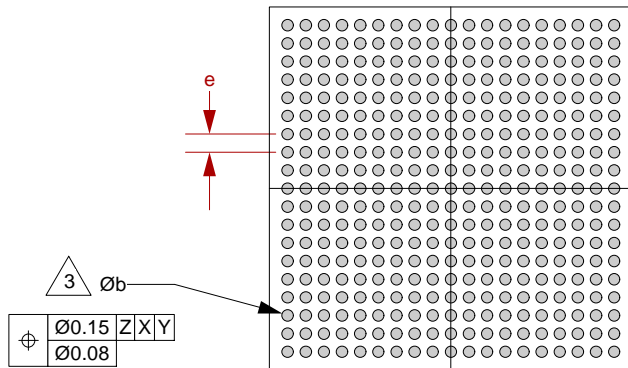
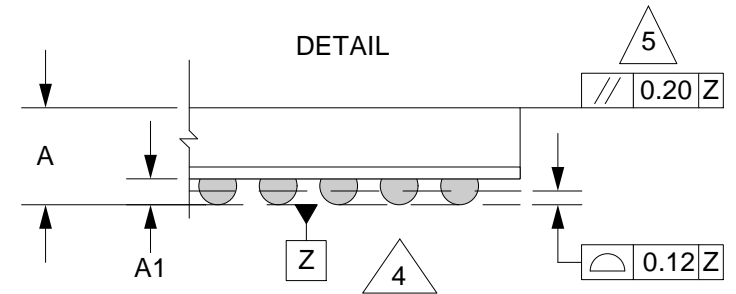
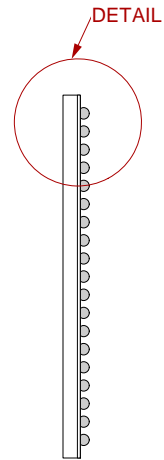
 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6033 Drawing</b></p>		Status: Released	Scale: NA	Rev: D
	<p>Drawing: H. Hansen</p>		<p>Date: 3/5/02</p>		
	<p>File: SG-BGA-6033 Dwg.mcd</p>		<p>Modified: 7/16/09, AE</p>		

BGA IC Size	Pitch	Array
16x16mm	0.8mm	19x19

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		1.20
A1	0.25	0.40
b	0.42	0.48
D	15.80	16.20
E	15.80	16.20
e	0.8 BSC	

Array: 19x19

	<b>SG-BGA-6033 Drawing</b>	Status: Released	Scale: -	Rev: D
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