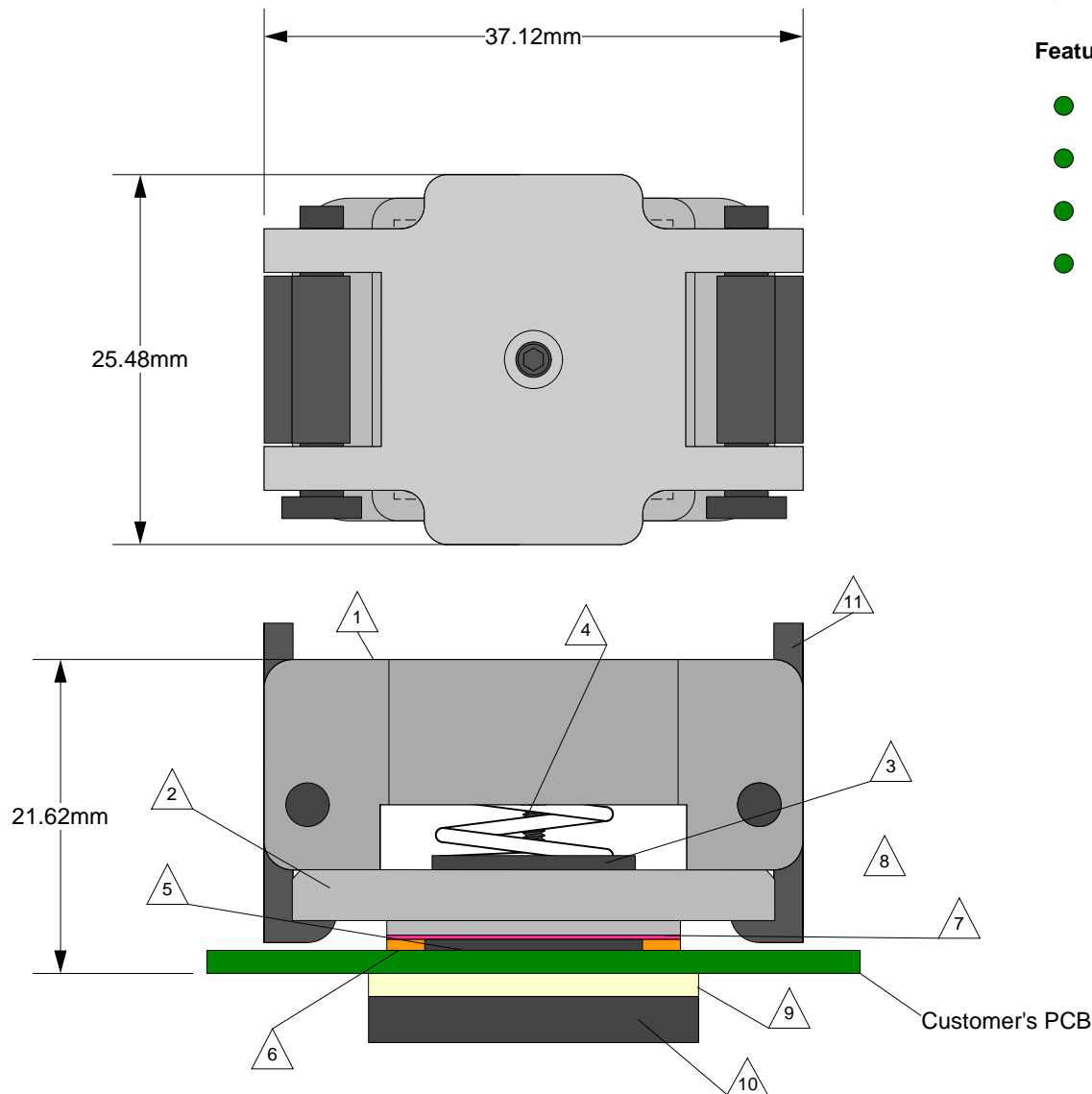


# GHz BGA Socket - Direct mount, solderless

## 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



- △ 1 Clamshell Socket Lid: Black anodized Aluminum. Thickness = 10mm.
- △ 2 Socket base: Black anodized Aluminum. Thickness = 7.5mm.
- △ 3 Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
- △ 4 Compression screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 1" long.
- △ 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, 1" long.
- △ 9 Insulation Plate: FR4/G10, Thickness = 1.59mm.
- △ 10 Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.
- △ 11 Latch: Black anodized Aluminum.

## SG-BGA-7107 Drawing

© 2007 IRONWOOD ELECTRONICS, INC.  
11351 Rupp Dr. Ste 400 Burnsville, MN 55337  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: A

Drawing: J. Glab

Date: 9/27/07

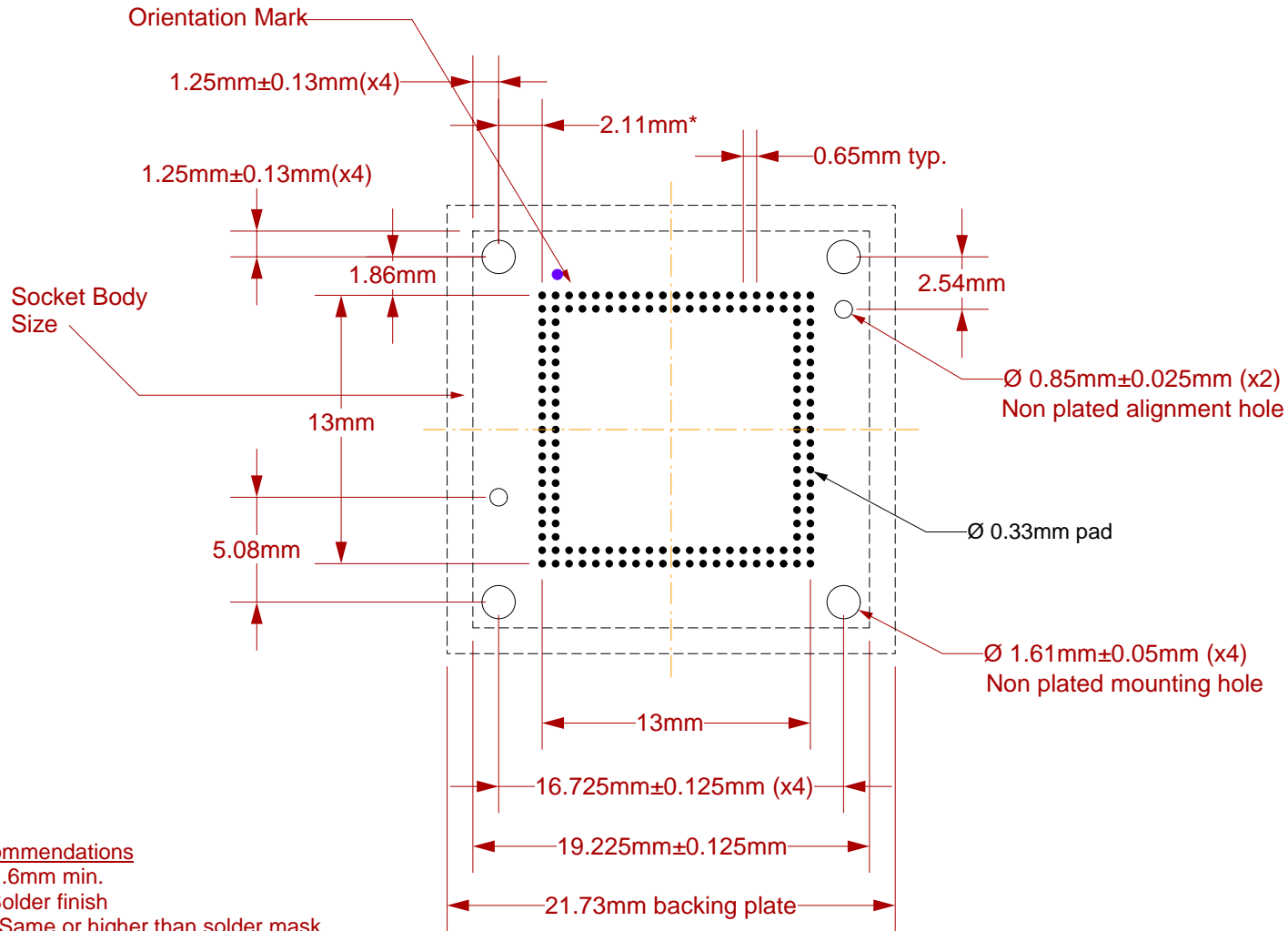
File: SG-BGA-7107 Dwg.mcd

Modified:

All tolerances:  $\pm 0.125\text{mm}$  (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.**

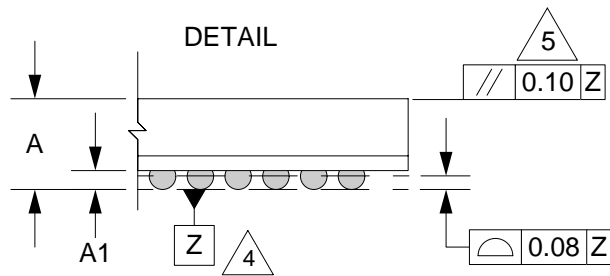
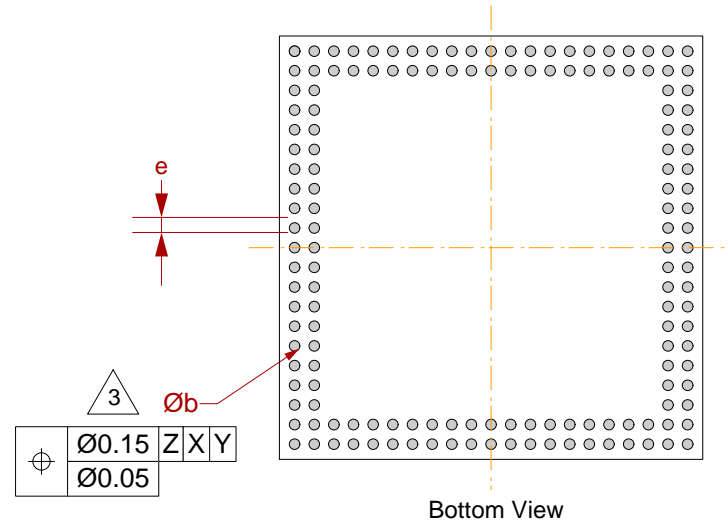
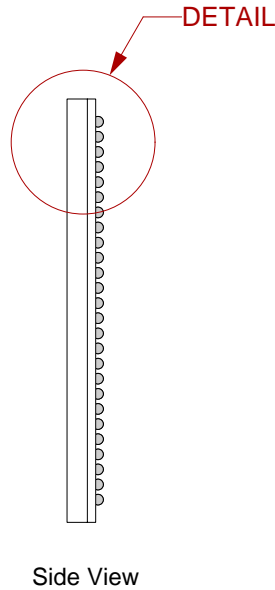
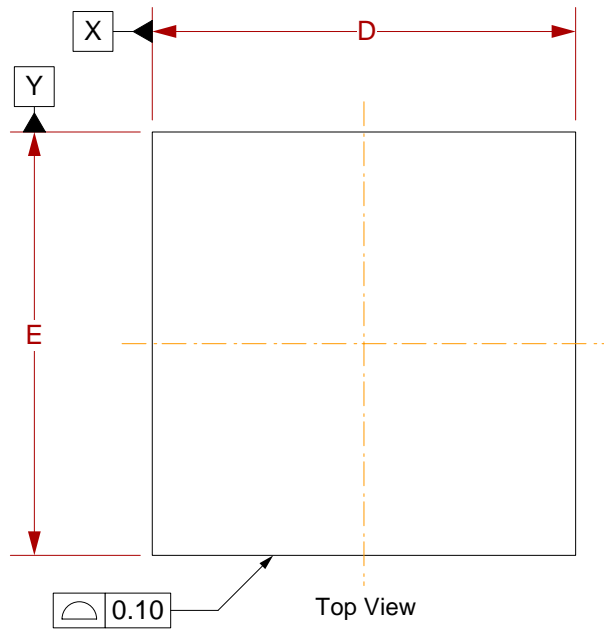


Target PCB Recommendations

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

Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

	<b>SG-BGA-7107 Drawing</b>	Status: Released	Scale: -	Rev: A
	© 2007 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Ste 400 Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 9/27/07	
		File: SG-BGA-7107 Dwg.mcd	Modified:	




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

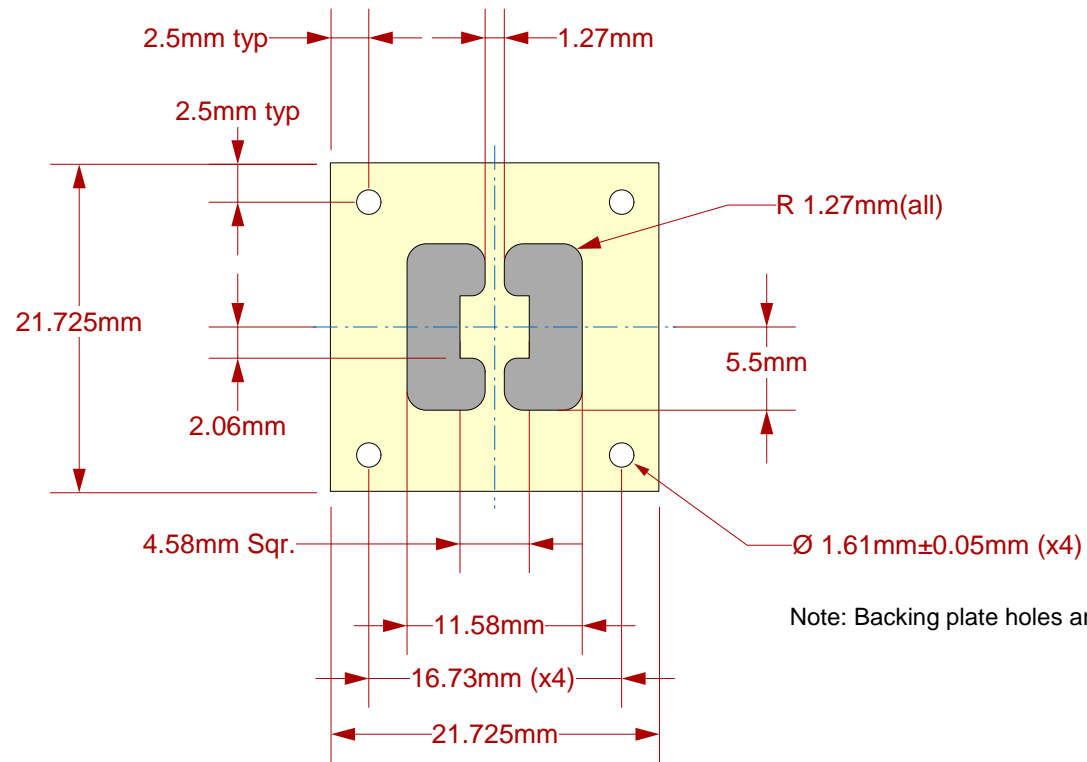
DIM	MIN	MAX
A		1.20
A1	0.27	0.37
b		0.45
D	14.00 BSC	
E	14.00 BSC	
e	0.65 BSC	

Array 21x21

All dimensions are in mm unless stated otherwise

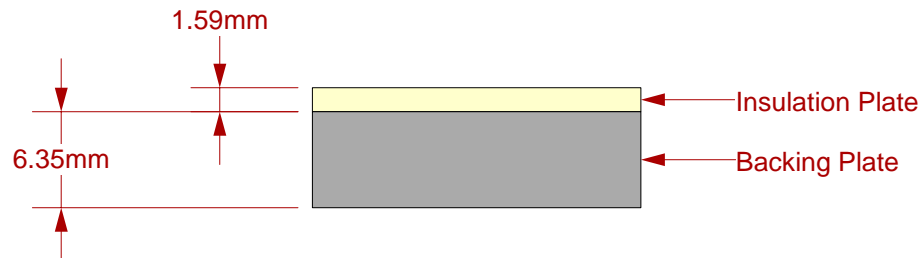
	<b>SG-BGA-7107 Drawing</b>	Status: Released	Scale: -	Rev: A
	© 2007 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Ste 400 Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab		Date: 9/27/07
		File: SG-BGA-7107 Dwg.mcd	Modified:	

Top View




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

Front View



Description: Insulation Plate and Backing Plate

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

	<b>SG-BGA-7107 Drawing</b>	Status: Released	Scale: -	Rev: A
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		File: SG-BGA-7107 Dwg.mcd	Modified:	