45.225mm Top View 45.225mm

Assembled

9.98mm +

IC thickness

Side View

(Section AA)

GHz BGA Socket - Direct mount, solderless

Features

Recommended torque = 31 in lbs./

Customer's Target PCB

- 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

496 in oz.

Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.



Socket base: Black anodized Aluminum. Thickness = 7.5mm.



Compression Plate: Black anodized Aluminum. Thickness = 4.0mm.



Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.



Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle).

Thickness = 0.75mm.



Elastomer Guide: Cirlex or equivalent. Thickness = 0.725mm.



Ball Guide: Kapton polyimide.



Socket base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 12.7mm long.



Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.



Insulation Plate: FR4/G10, 1.59mm thick.



/\	
/11	
711	

Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.

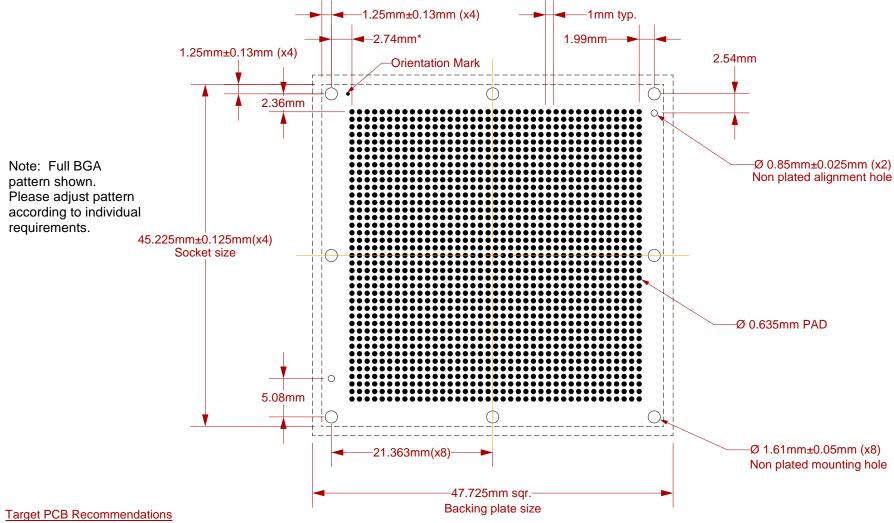
SG-BGA-6197 Drawing	Status: Released	Scale:	-	Rev: B	
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337	Drawing: J.Glab		Date: 10/27/06		
Tele: (952) 229-8200 www.ironwoodelectronics.com	File: SG-BGA-6197 Dwg		Modified: 7/21/09, AE		

Customer's

BGAIC

/5\

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



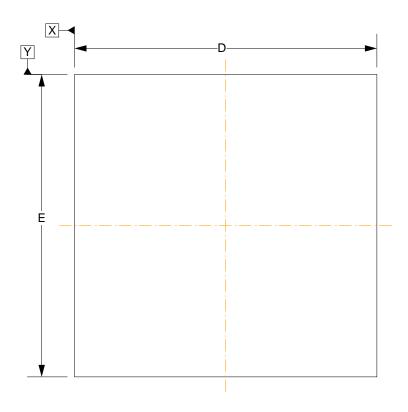
Target PCB Recommendations
Total thickness: 2.4mm min.
Plating: Gold or Solder finish

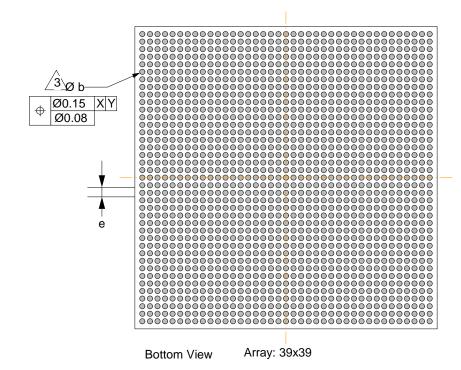
PCB Pad height: Same or higher than solder mask

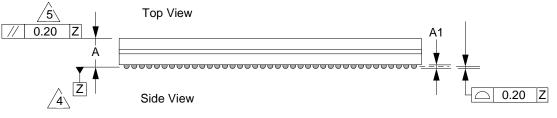
NOTE: Steel backing plate may be required based on end user's application

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

SG-BGA-6197 Drawing	Status: Released	Scale	: 2:1	Rev: B
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Tele: (952) 229-8200 www.ironwoodelectronics.com	File: SG-BGA-6197 Dwg		Modified: 7/21/09, AE	







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.

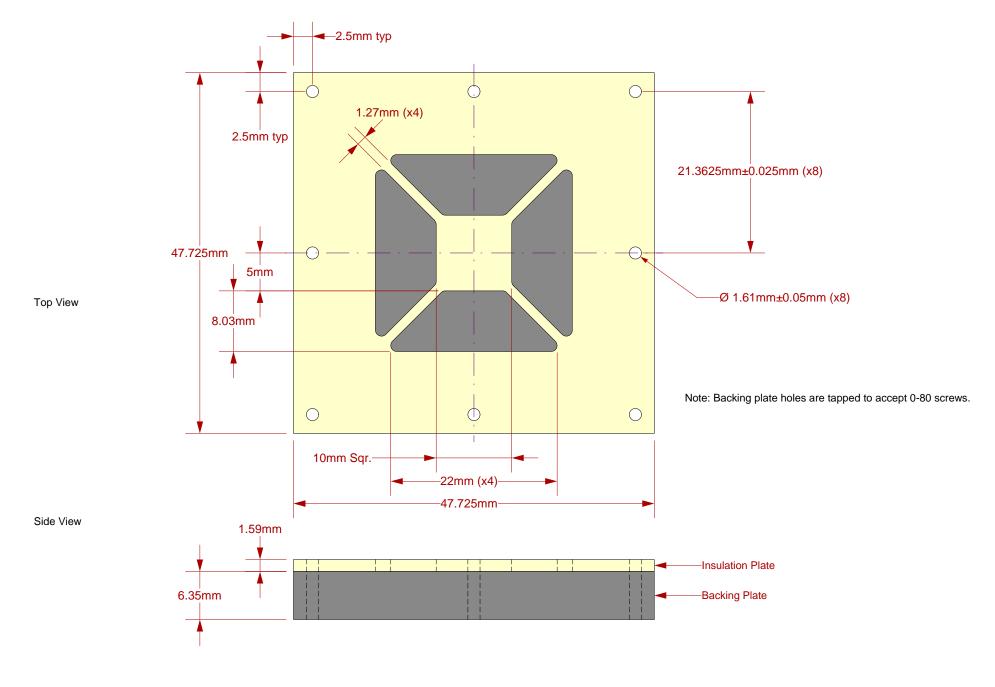
5

Parallelism measurement shall exclude any effect of mark on top surface of package.

DIM	MIN	MAX		
Α		3.5		
A1	0.3	0.6		
b		0.70		
D	40.0 BSC			
Е	40.0 BSC			
е	1.0 BSC			

Array: 39x39

SG-BGA-6197 Dr	awing	Status: Released	Scale:	2:1	Rev: B
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab		Date: 10/27/06		
	File: SG-BGA-6197 Dwg		Modified: 7/21/09, AE		



Description: Insulation Plate and Backing Plate

SG-BGA-6197 Drawing	Status: Released	Scale	: 2:1	Rev: B
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	File: SG-BGA-6197 Dwg		Modified: 7/21/09, AE	

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