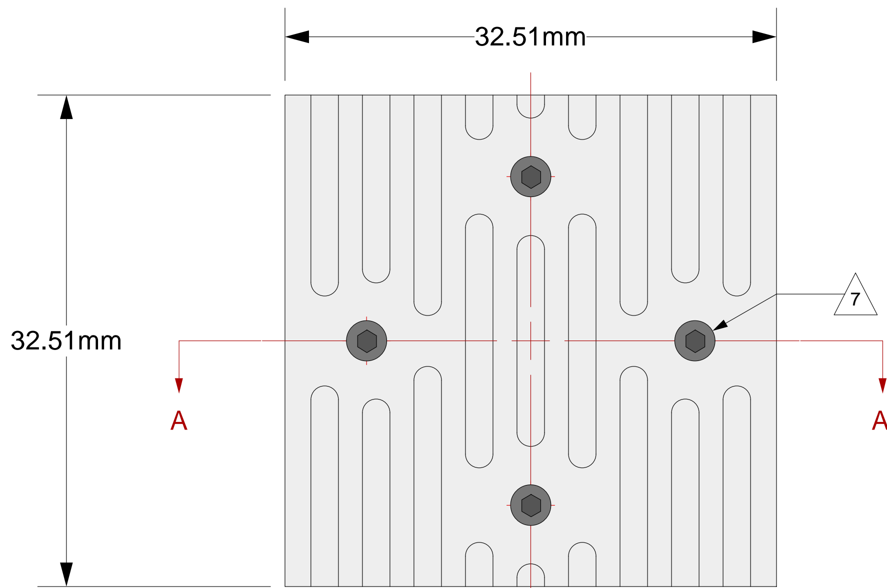
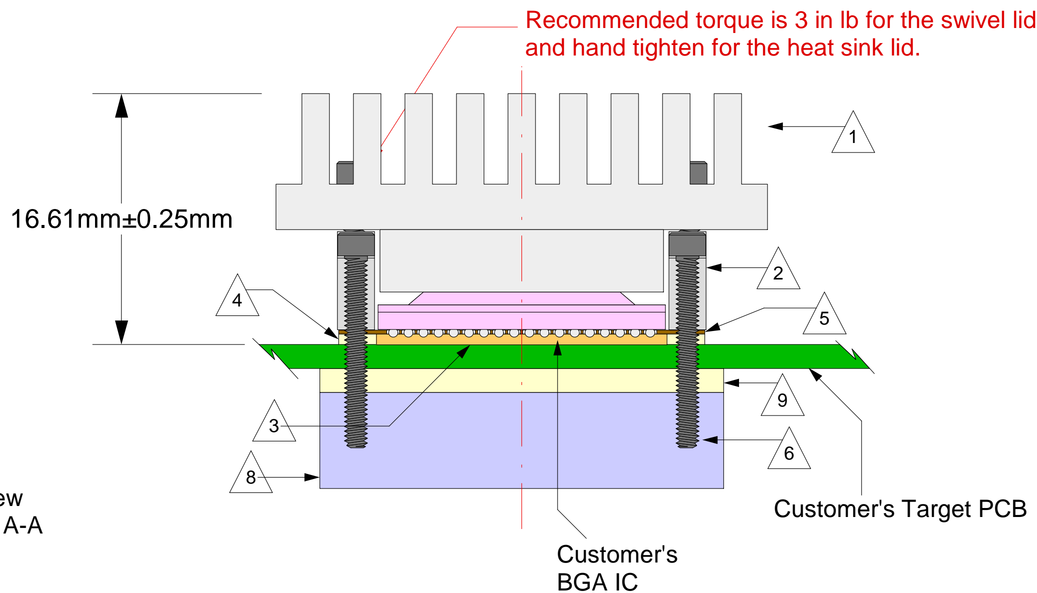


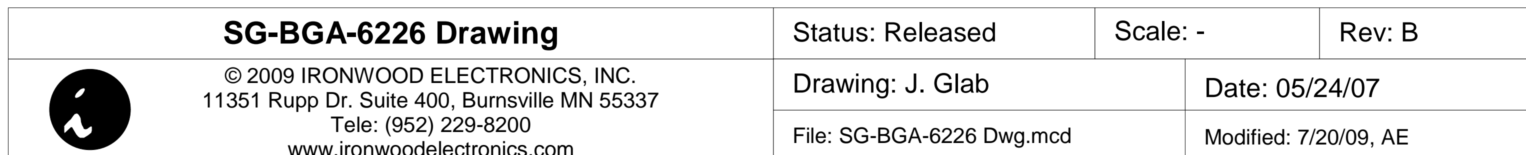
GHz BGA Socket - Direct mount, solderless

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
- Heat sink lid for power dissipation



1. Heatsink Lid: Black anodized Aluminum. Thickness = 16mm.
2. Socket base: Black anodized Aluminum. Thickness = 5mm.
3. Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
4. Elastomer Guide: Cirlex or equivalent. Thickness = 0.75mm.
5. Ball Guide: Kapton polyimide. Thickness = 0.25mm.
6. Socket base screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread , 12.7mm long.
7. Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
8. Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.
9. Insulation Plate: FR4/G10, Thickness = 1.59mm.



SG-BGA-6226 Drawing	Status: Released	Scale: -	Rev: B
© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Dr. Suite 400, Burnsville MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: J. Glab	Date: 05/24/07	
	File: SG-BGA-6226 Dwg.mcd	Modified: 7/20/09, 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.

Orientation Mark

1.25mm±0.125mm(x4)

1mm typ.

2.74mm*

heat sink size

1.25mm±0.125mm(x4)

2.36mm

2.54mm

Ø 0.85mm±0.025mm (x2)
Non Plated Alignment Hole

Socket
Body Size

24.225mm

Ø 0.51mmPAD

5.08mm

Ø 1.7mm±0.1mm (x4)
Non plated Mounting Hole

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

17mm

21.725mm(x4)

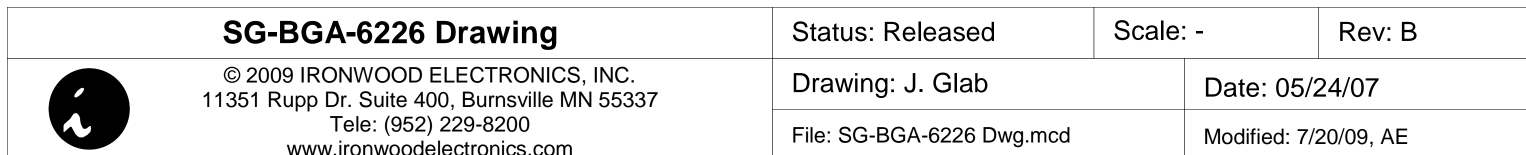
24.225mm

26.73mm sqr. backing plate

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: ±0.025mm [±0.001"] unless stated otherwise.



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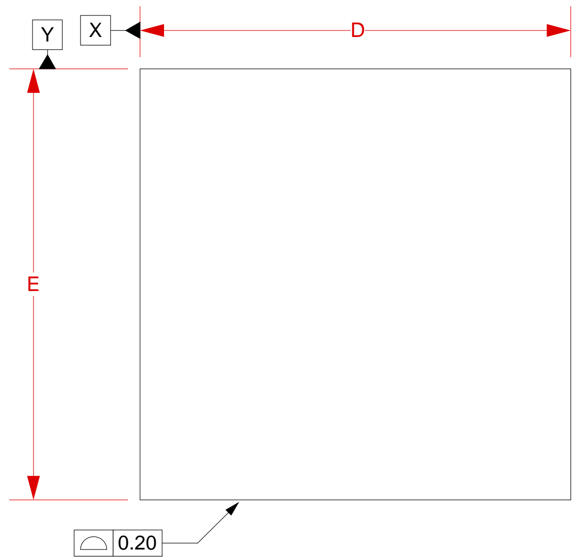
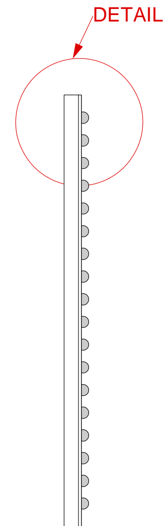
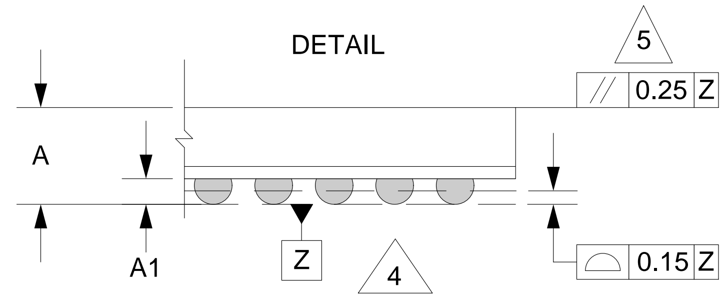
Compatible BGA Spec

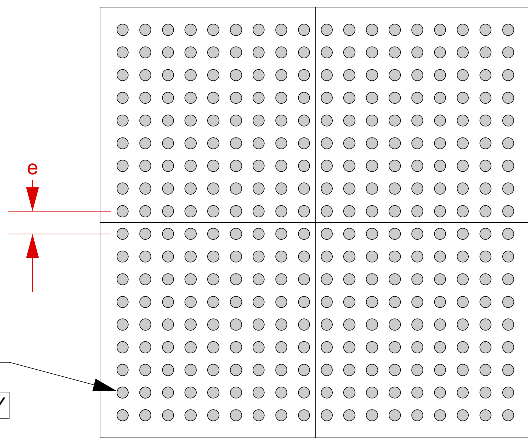
TOP VIEW



SIDE VIEW





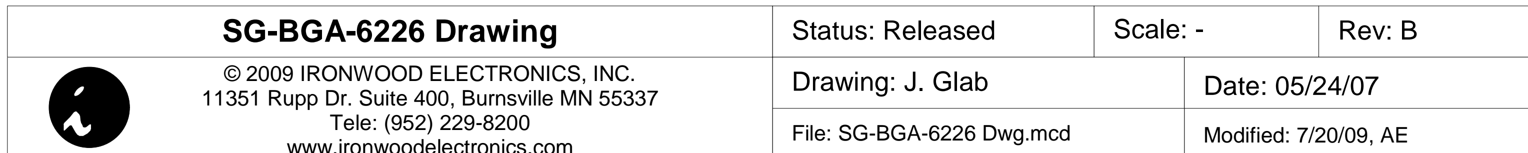


BOTTOM VIEW

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		3.42
A1	0.3	0.5
b		0.70
D	19.00 BSC	
E	19.00 BSC	
e	1.0 BSC	

Array: 18x18



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Top View

26.73mm

2.5mm

26.73mm

3mm

7mm

21.725mm±0.025mm

6mm sqr.

15.94mm

21.725mm±0.025mm

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

Side View

1.59mm

6.35mm

Insulation Plate

Backing Plate

Description: Backing Plate with Insulation Plate

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