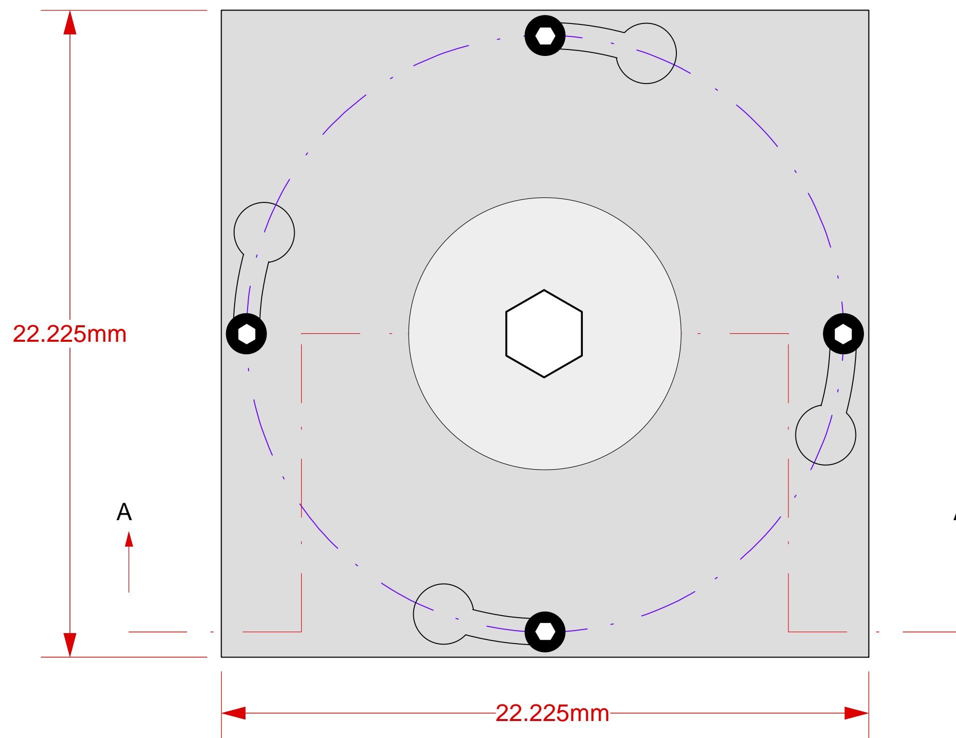
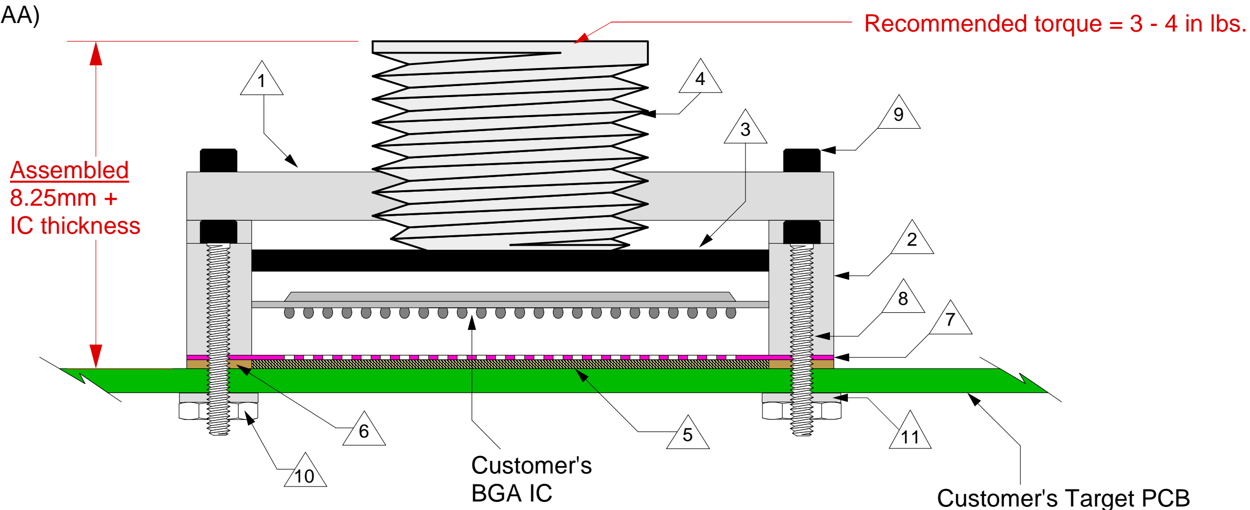
GHz BGA Socket - Direct mount, solderless



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 = 5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 2.5mm.
4	Compression screw: Black 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 thickness.

SG-BGA-6064 Drawing	Status: Released	Scale: -	Rev: C
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	File: SG-BGA-6064 Dwg.mcd	Modified: 7/6/09, 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±0.13mm(x4)

1.25mm±0.13mm(x4)

2.74mm*

1mm typ.

Socket
Body Size

2.36mm

2.54mm

Ø 0.85mm 0mm -0.025mm (x2)
Alignment Hole

Ø 0.51mmPAD

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

5.08mm

19.725mm (x4)

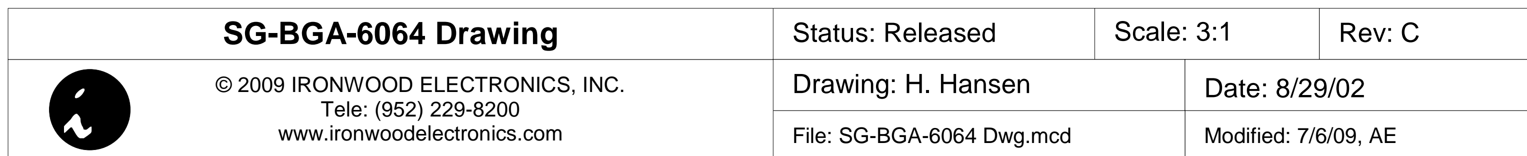
22.225mm±0.125mm (x4)

Ø 1.61mm 0mm -0.025mm (x4)
Mounting Hole

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.



SG-BGA-6064 Drawing	Status: Released	Scale: 3:1	Rev: C
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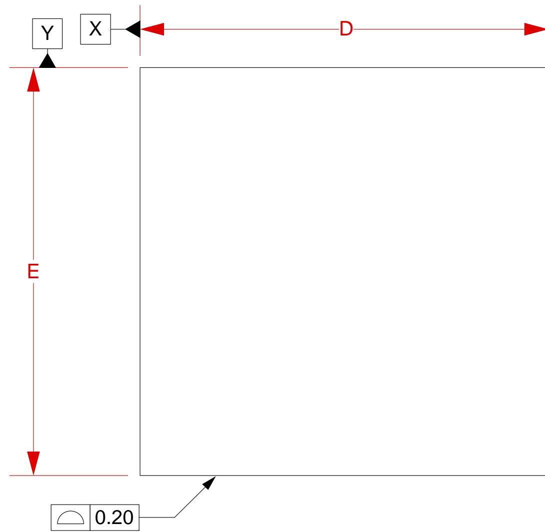
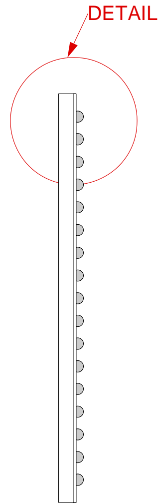
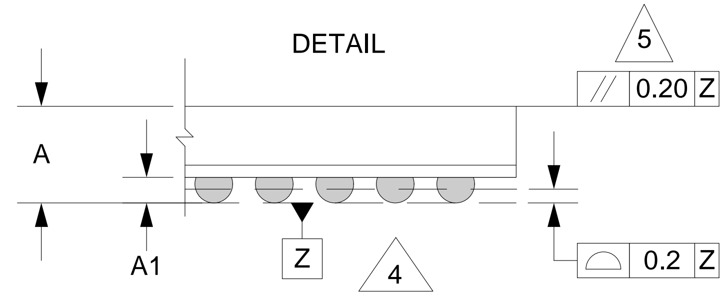
Compatible BGA Spec

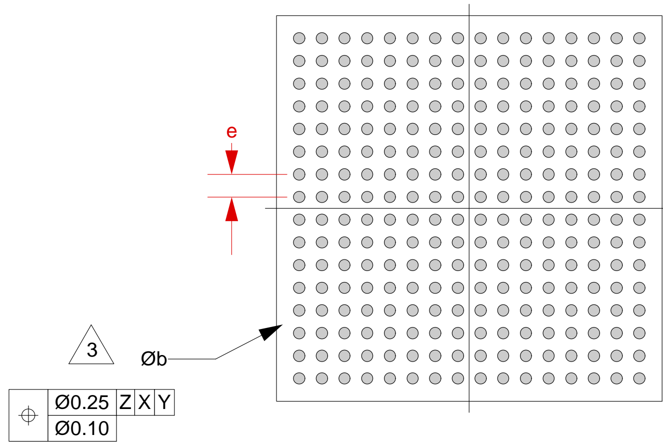
TOP VIEW



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 plame 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		2.02
A1	0.3	0.5
b		0.6
D	17.00 BSC	
E	17.00 BSC	
e	1.0 BSC	

Array 16x16

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