Side View

**Assembled** 8.25mm +

IC thickness

## 30.5mm 40.1mm

## GHz BGA Socket - Direct mount, solderless

## **Features**

Recommended torque = 4 - 6 in lbs.

- 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



Socket Lid: Black anodized 6061 Aluminum. Thickness = 2.5mm.



Socket base: Black anodized 6061 Aluminum. Thickness = 5mm.

Compression Plate: Black anodized 6061 Aluminum. Thickness = 2.5mm.



Compression screw: Black anodized 6061 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: Non-clad FR4. Thickness = 0.75mm.



Ball Guide: Kapton polyimide.



Socket base screw: Philips round head, alloy steel with black oxide finish, 2-56 fine thread, 12.7mm long.



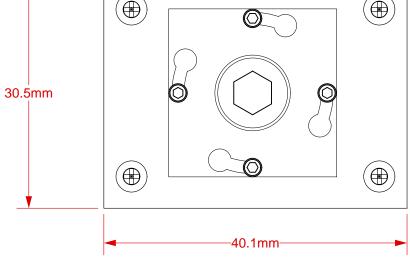
Socket lid screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 4.76mm long.



Socket base nut: 18-8 Stainless steel, 2-56 fine thread, 4.76mm width, 1.59mm height.



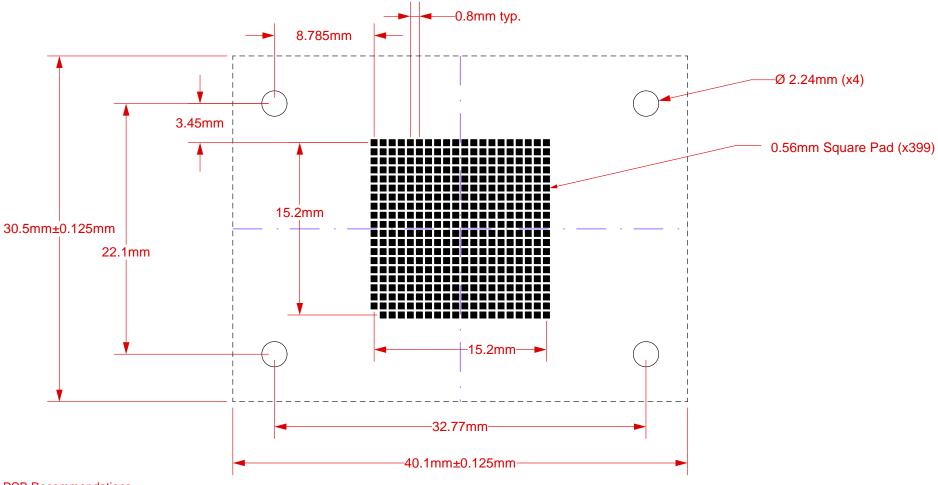
Nylon washer: 2.4mm ID; 4.76mm OD 0.5mm thickness.



Customer's Target PCB SG-BGA-6057 Drawing Scale: 2:1 Status: Released Rev: B © 2002 IRONWOOD ELECTRONICS, INC. Drawing: H. Hansen Date: 8/13/02 PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 File: SG-BGA-6057 Dwg.mcd Modified: 10/15/02 www.ironwoodelectronics.com

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

## Recommended PCB Layout Top View



Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish

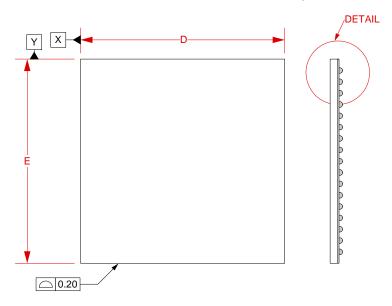
PCB Pad height: Same or higher than solder mask

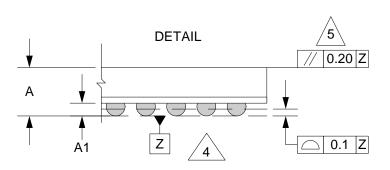
NOTE: Steel backing plate may be required based on end user's application

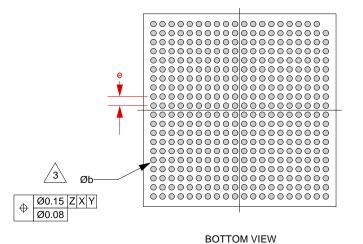
Recommended PCB Layout Tolerances: ±0.025mm [±0.001"] unless stated otherwise.

SG-BGA-6057 Drawing	Status: Released	Scale:	3:1	Rev: B
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	File: SG-BGA-6057 Dwg.mcd		Modified: 10/15/2	

SIDE VIEW







1.	Dimensions	are in	millimete	rs
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 Interpret dimensions and toleraces per ASME Y14.5M-1994.

Dimension b is measured at the maximum solder ball diameter, parallel to datum plame Z.

Datum Z (seating plane) is defined by the spherical crowns of the solder balls.

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

DIM	MIN	MAX		
Α		1.7		
A1	0.25	0.35		
b		0.45		
D	17.00 BSC			
Е	17.00 BSC			
е	0.8 BSC			

Array (20x20)-1= 399 Balls

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