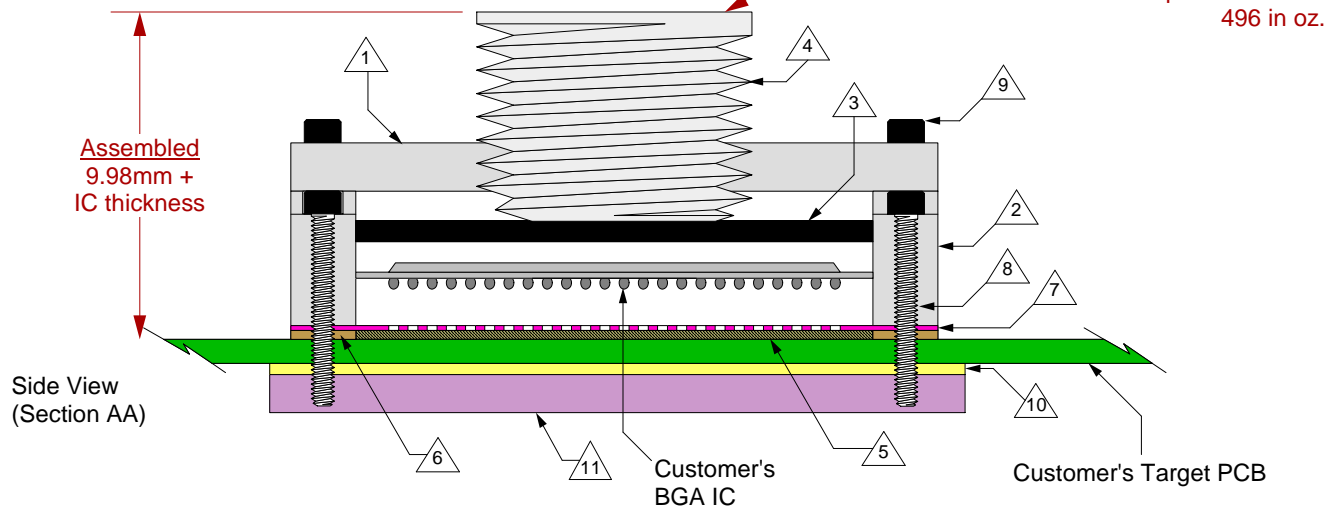
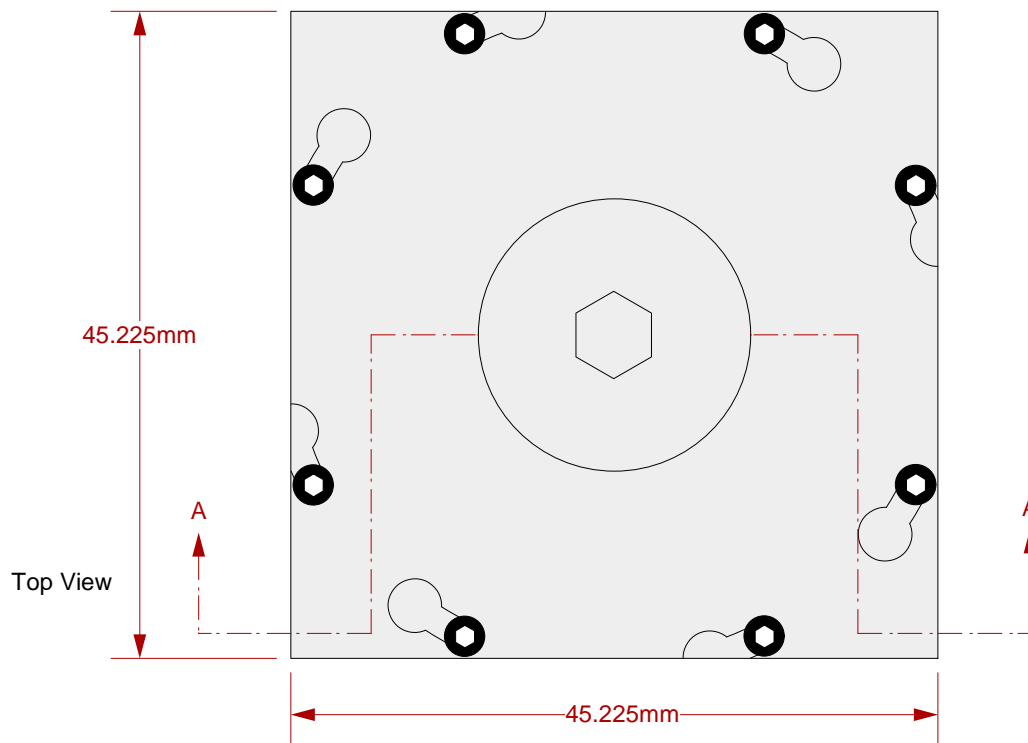


# GHz BGA Socket - Direct mount, solderless

## 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 = 7.5mm.
- 3 Compression Plate: Black anodized Aluminum. Thickness = 4.0mm.
- 4 Compression screw: Clear 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: Cirlex or equivalent. Thickness = 0.75mm.
- 7 Ball Guide: Kapton polyimide.
- 8 Socket base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread, 12.7mm long.
- 9 Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.
- 10 Insulation Plate: FR4/G10, 1.59mm thick.
- 11 Backing Plate: Black anodized Aluminum. Thickness = 6.35mm.

## SG-BGA-6049 Drawing

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11351 Rupp Drive, Suite 400, Burnsville, MN 55337  
Tele: (952) 229-8200  
www.ironwoodelectronics.com

Status: Released

Scale: -

Rev: H

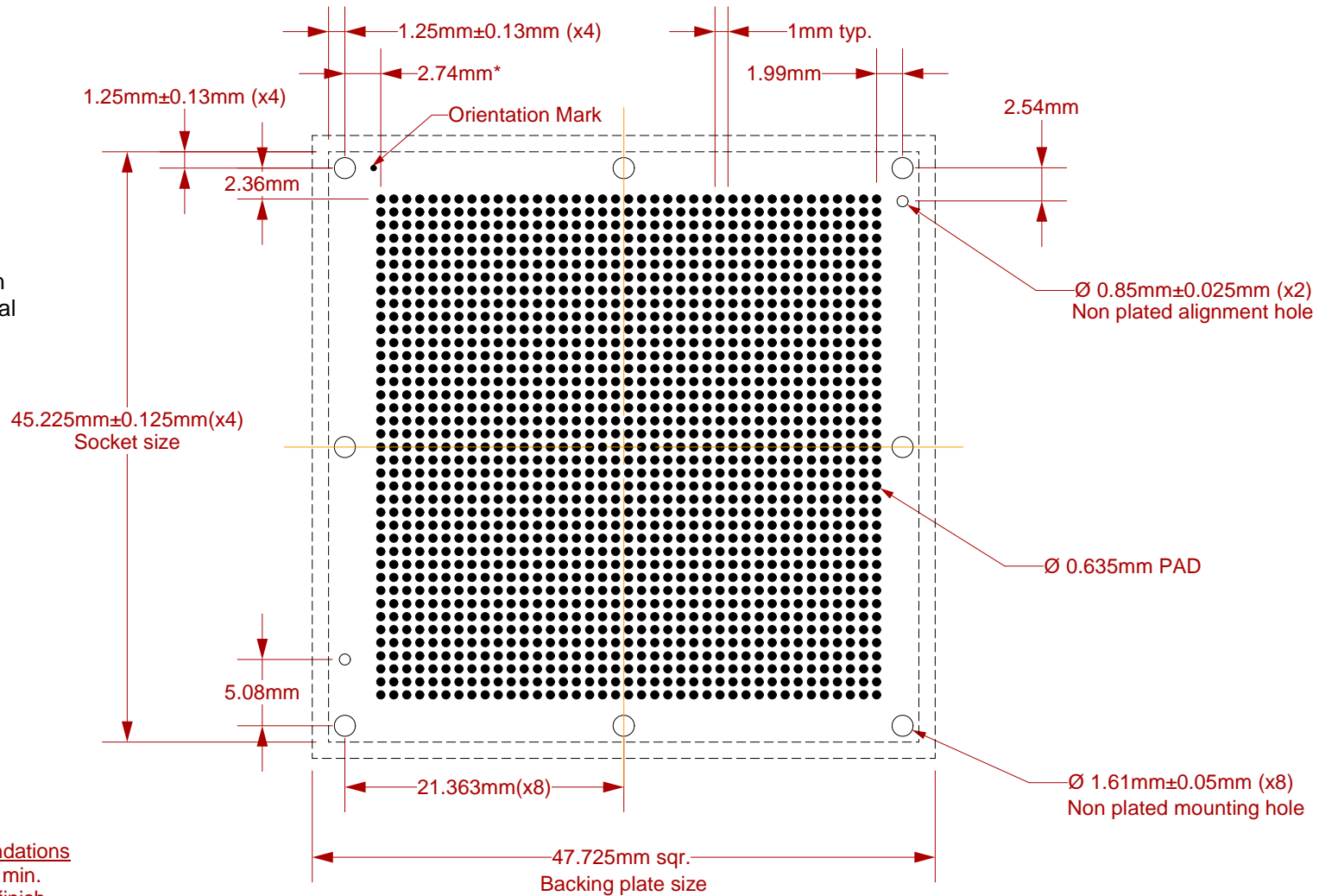
Drawing: H. Hansen

Date: 5/1/02

File: SG-BGA-6049 Dwg

Modified: 7/21/09, AE

All tolerances:  $\pm 0.125\text{mm}$  (unless stated otherwise). Materials and specifications are subject to change without notice.




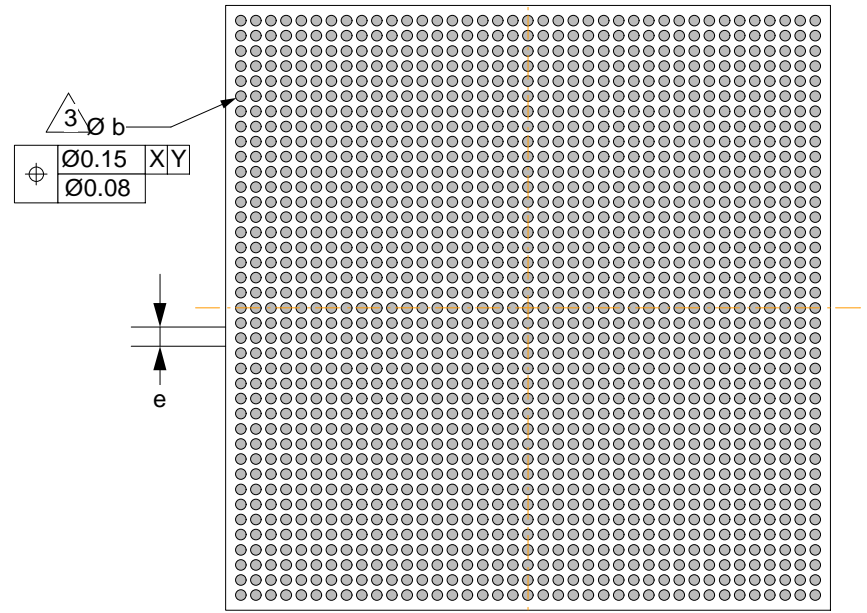
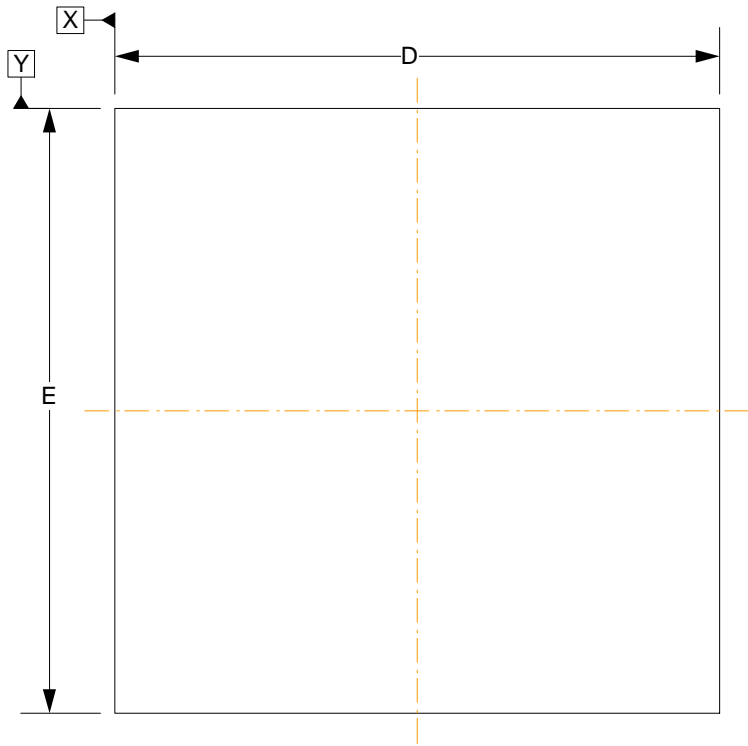
Note: Full BGA pattern shown. Please adjust pattern according to individual requirements.

**Target PCB Recommendations**  
 Total thickness: 2.4mm min.  
 Plating: Gold or Solder finish  
 PCB Pad height: Same or higher than solder mask

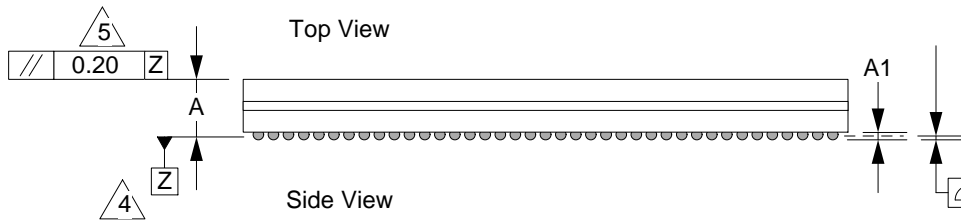
NOTE: Steel backing plate may be required based on end user's application

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

 <p>© 2009 IRONWOOD ELECTRONICS, INC.          11351 Rupp Drive, Suite 400, Burnsville, MN 55337          Tele: (952) 229-8200  <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a></p>	<b>SG-BGA-6049 Drawing</b>		Status: Released	Scale: 2:1	Rev: H
	Drawing: H. Hansen		Date: 5/1/02		
	File: SG-BGA-6049 Dwg		Modified: 7/21/09, AE		




Bottom View Array: 39x39



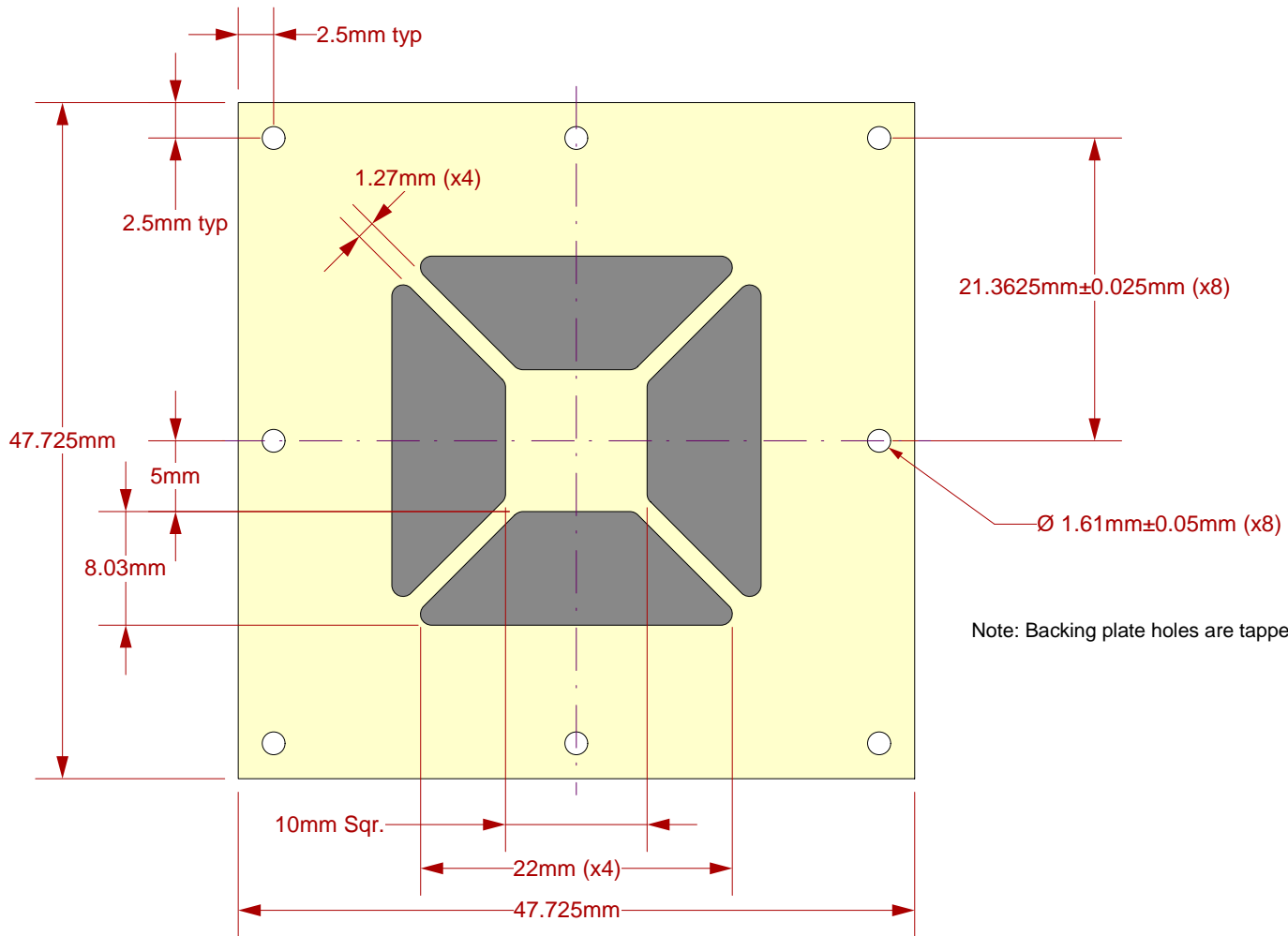
1. Dimensions are in millimeters.
  2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
- Dimension  $b$  is measured at the maximum solder ball diameter, parallel to datum plane  $Z$ .
3. Datum  $Z$  (seating plane) is defined by the spherical crowns of the solder balls.
  4. Parallelism measurement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

DIM	MIN	MAX
A		3.5
A1	0.4	0.6
b		0.70
D	40.0 BSC	
E	40.0 BSC	
e	1.0 BSC	

Array: 39x39

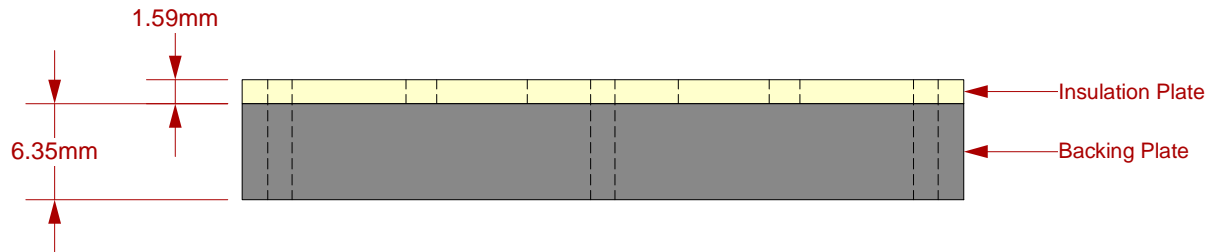
	<b>SG-BGA-6049 Drawing</b>	Status: Released	Scale: 2:1	Rev: H
	© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: H. Hansen		Date: 5/1/02
		File: SG-MGA-6049 Dwg	Modified: 7/21/09, AE	

Top View




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

Side View



Description: Insulation Plate and Backing Plate

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	Drawing: H. Hansen		Date: 5/1/02	
	File: SG-MGA-6049 Dwg		Modified: 7/21/09, AE	

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