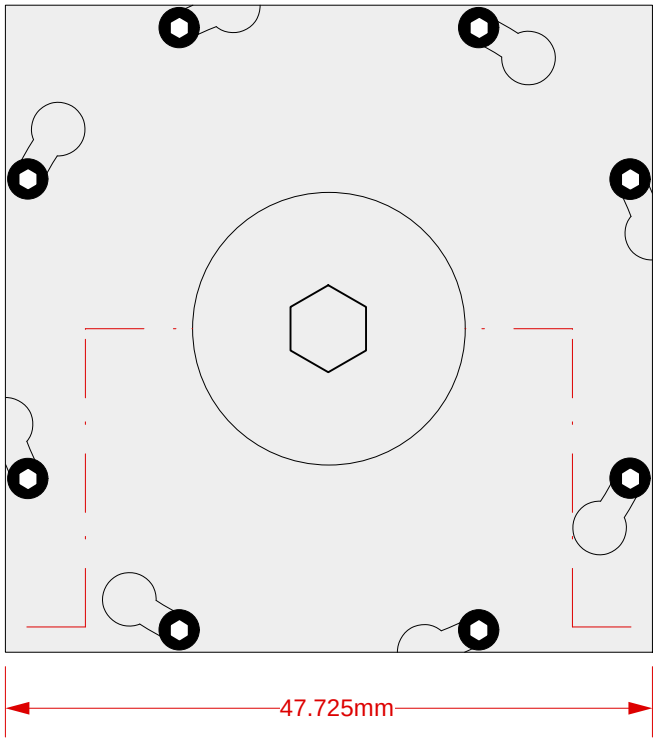
GHz BGA Socket - Direct mount, solderless

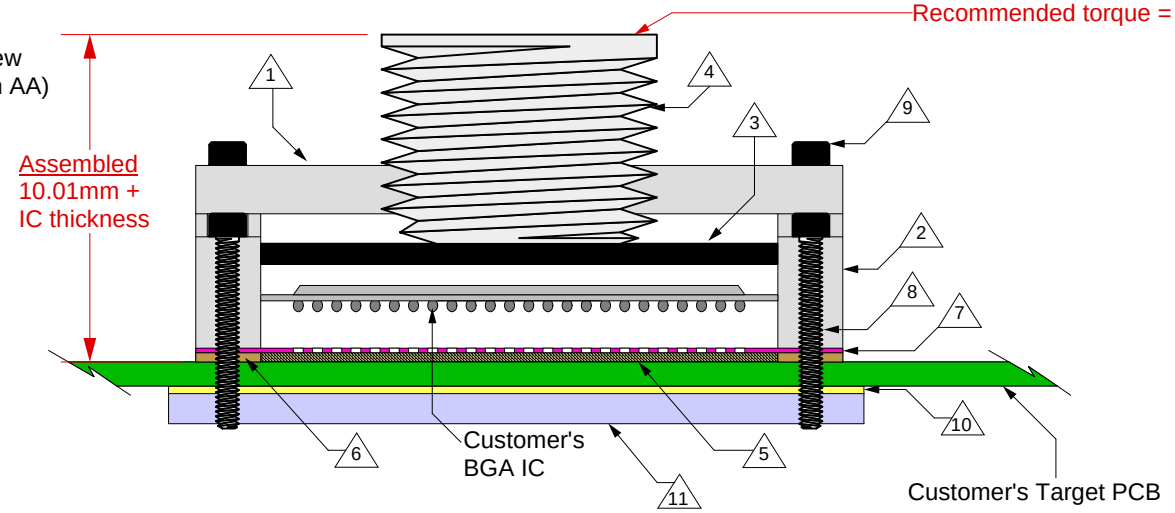
Top View



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

Side View
(Section AA)



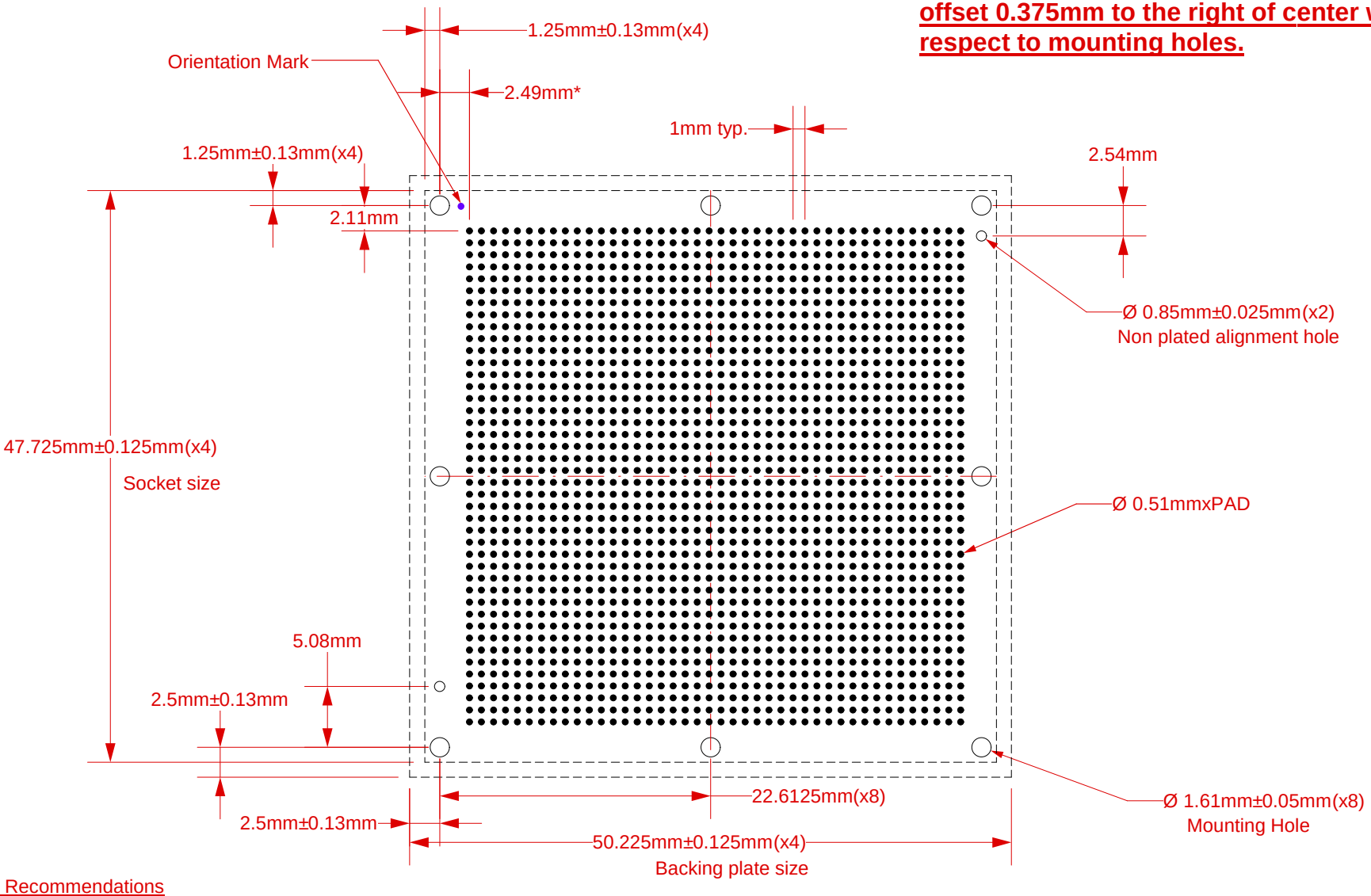
1	Socket Lid: Black anodized Aluminum. Thickness = 2.5mm.
2	Socket base: Black anodized Aluminum. Thickness = 7.5mm.
3	Compression Plate: Black anodized Aluminum. Thickness = 4.0mm.
4	Compression screw: Clear anodized Aluminum. Thickness = 5mm, Hex socket = 5mm.
5	Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle). Thickness = 0.75mm.
6	Elastomer Guide: Cirlex or equivalent. Thickness = 0.725mm.
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	Insulation Plate: FR4/G10, 1.59mm thick.
11	Backing Plate: Anodized Aluminum 6.35mm thick.

SG-BGA-6082 Drawing	Status: Released	Scale: -	Rev: D
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: Heidi Hansen	Date: 4/3/03	
	File: **SG-BGA-6082** Dwg.mcd	Modified: 4/13/11, RP	

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. It is offset 0.375mm to the right of center with respect to mounting holes.**



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

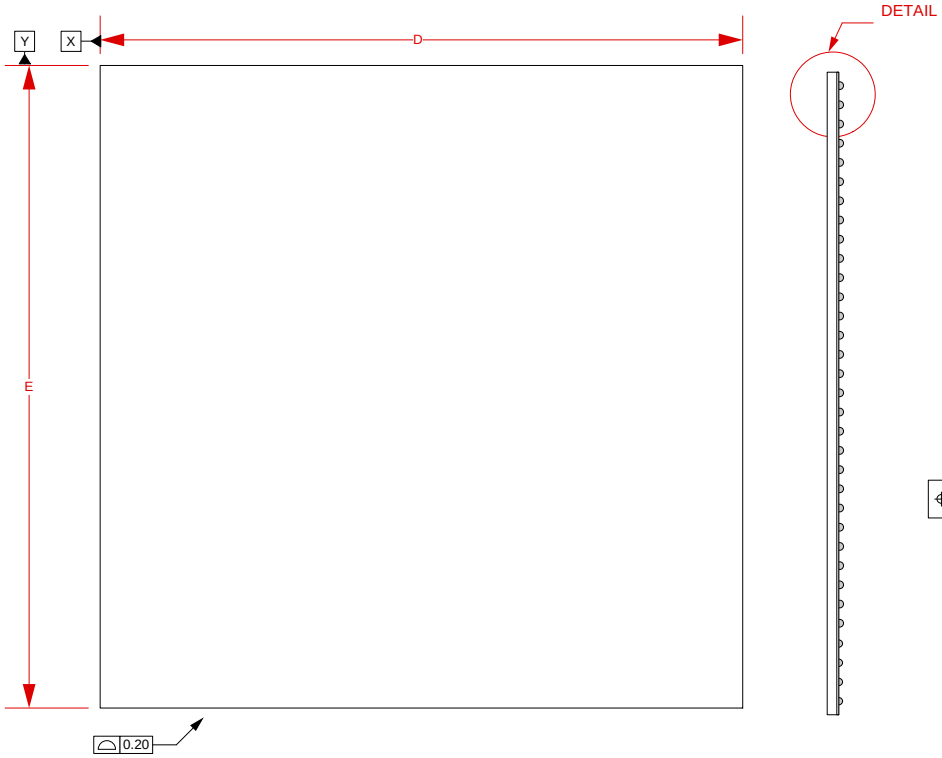
NOTE: Steel backing plate may be required based on end user's application

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

Full pattern shown. Please adjust as per individual requirements.

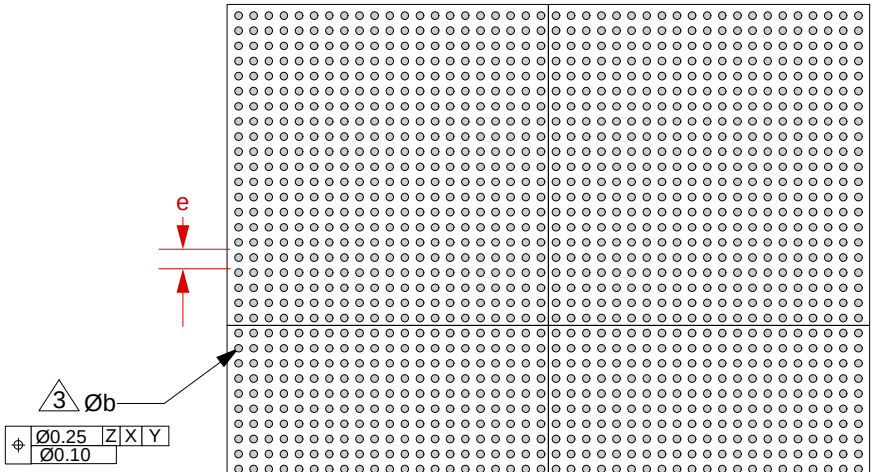
SG-BGA-6082 Drawing	Status: Released	Scale: -	Rev: D
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: Heidi Hansen		Date: 4/3/03
	File: **SG-BGA-6082** Dwg.mcd		Modified: 4/13/11, RP

Compatible BGA Spec: BGA1764 (and sub-set arrays)

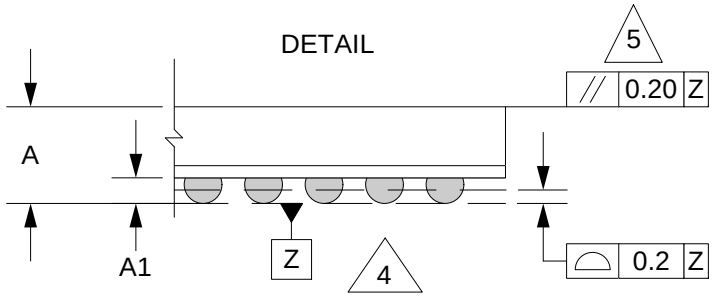


TOP VIEW

SIDE VIEW



BOTTOM VIEW



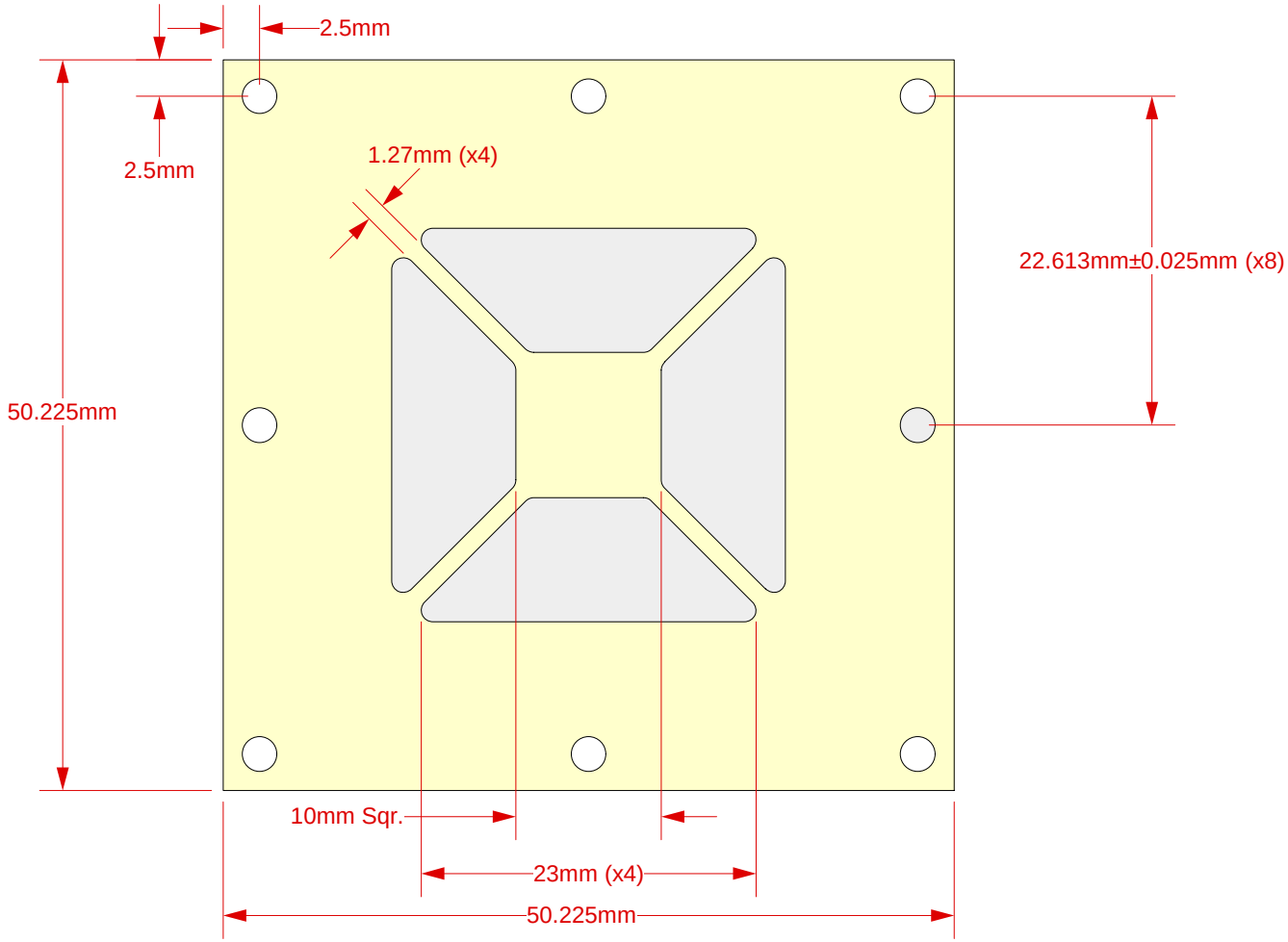
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

DIM	MIN	MAX
A		3.45
A1	0.40	0.60
b		0.70
D	42.50 BSC	
E	42.50 BSC	
e	1.0 BSC	

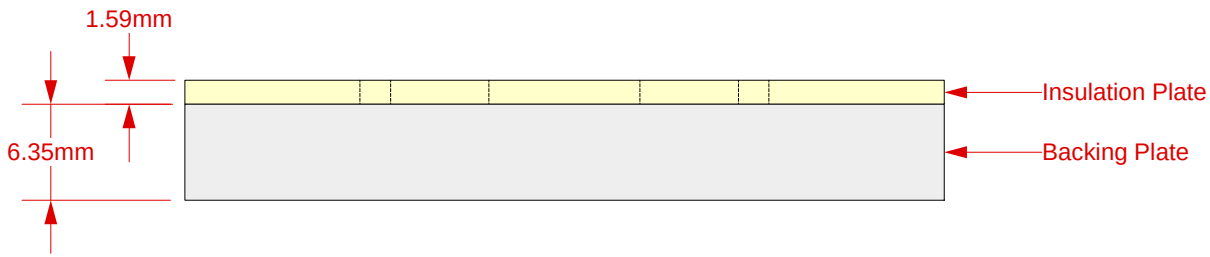
Array: 42x42

SG-BGA-6082 Drawing	Status: Released	Scale: -	Rev: D
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: Heidi Hansen	Date: 4/3/03	
	File: **SG-BGA-6082** Dwg.mcd	Modified: 4/13/11, RP	

Top View



Side View



Description: Backing Plate with Insulation Plate

SG-BGA-6082 Drawing	Status: Released	Scale: -	Rev: D
 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com	Drawing: Heidi Hansen		Date: 4/3/03
	File: **SG-BGA-6082** Dwg.mcd		Modified: 4/13/11, RP

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