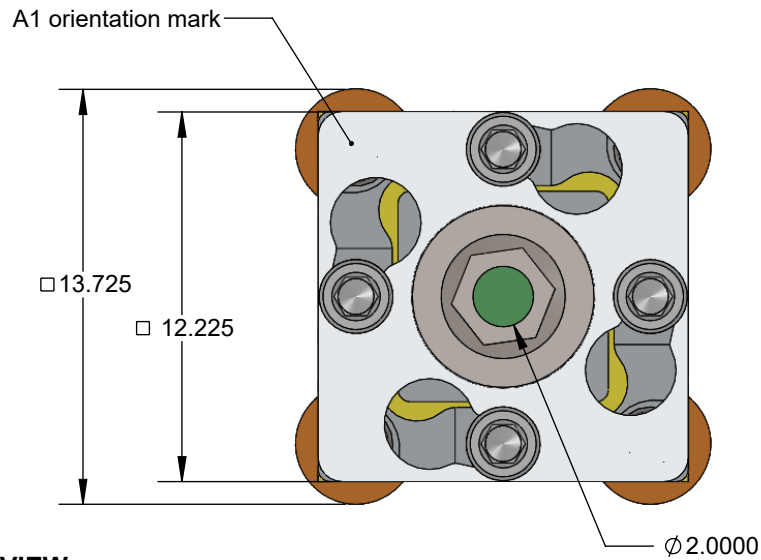


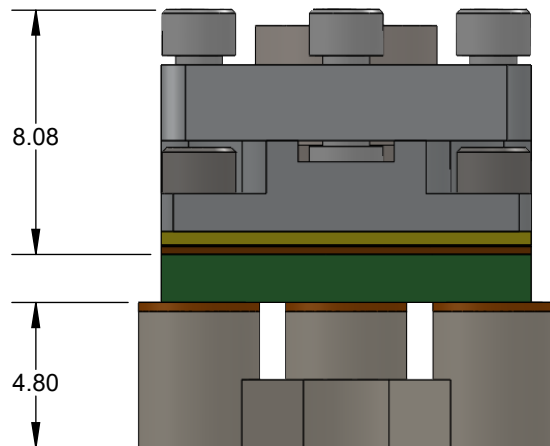
# GHz BGA Socket - Direct mount, solderless

## 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

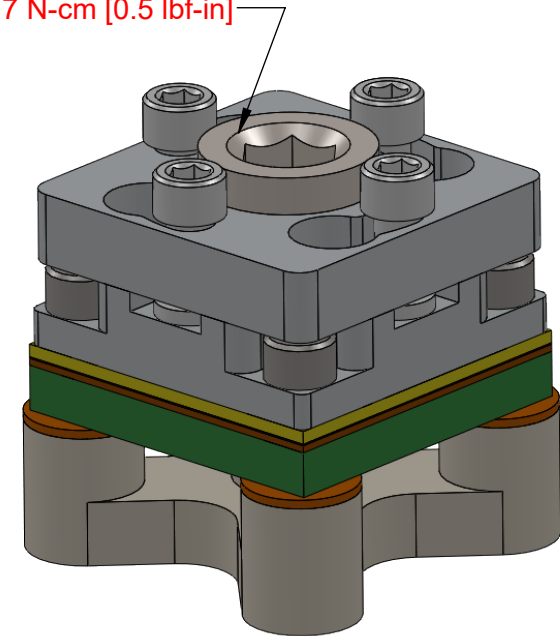


TOP VIEW



FRONT VIEW

Recommended torque = 5.7 N-cm [0.5 lbf-in]



ISO VIEW

## Description: SG25-BGA64, 4mm, 0.4mm pitch

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

### SG25-BGA-2018 Drawing



Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 4.72

STATUS: Released

ENG: M.A. Fedde

FILE: SG25-BGA-2018 Dwg

SHEET: 1 OF 4

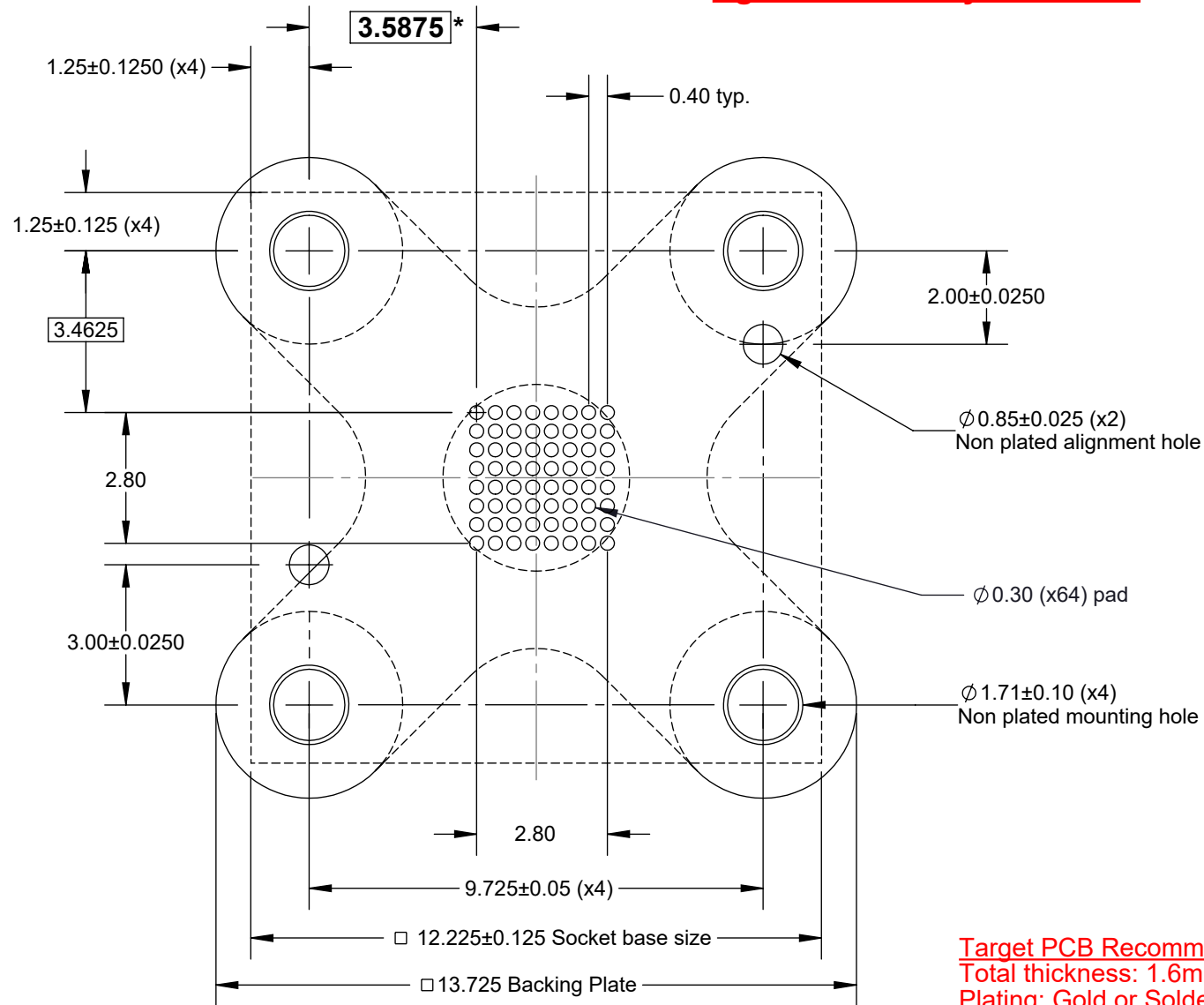
DRAWN BY: M. Raske

DATE: 01/27/2016

REV. A

SCALE: 4:1

**\*Note: BGA pattern is not symmetrical with respect to the mounting holes. The pattern is shifted to the right of center by 0.125mm.**




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

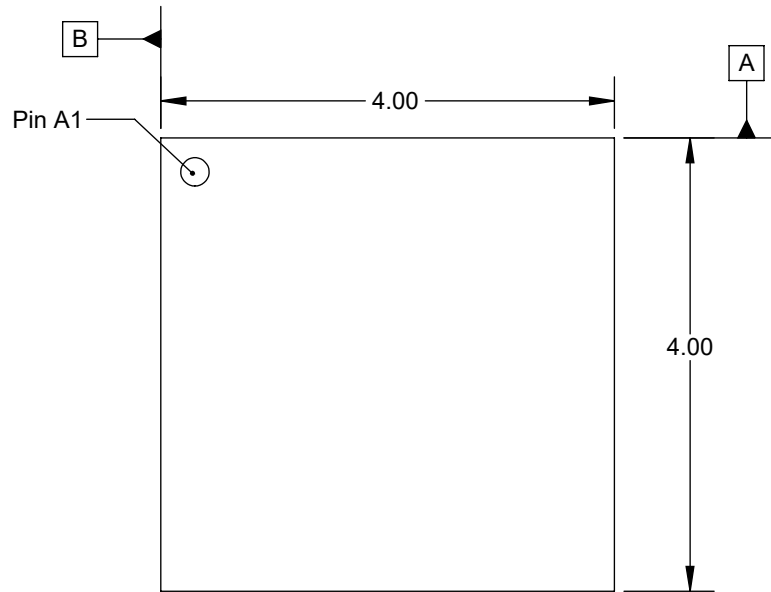
## Description: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

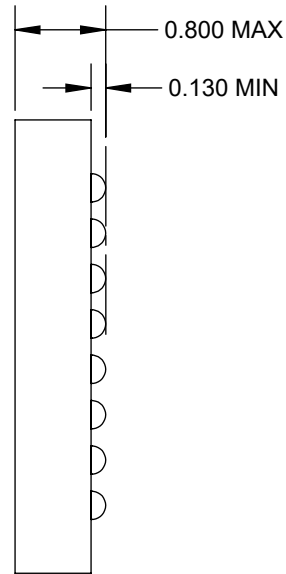
**Tolerances:** Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

	<b>SG25-BGA-2018 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 4.72	STATUS: Released	SHEET: 2 OF 4	REV. A
			ENG: M.A. Fedde	DRAWN BY: M. Raske	SCALE: 7:1
			FILE: SG25-BGA-2018 Dwg	DATE: 01/27/2016	

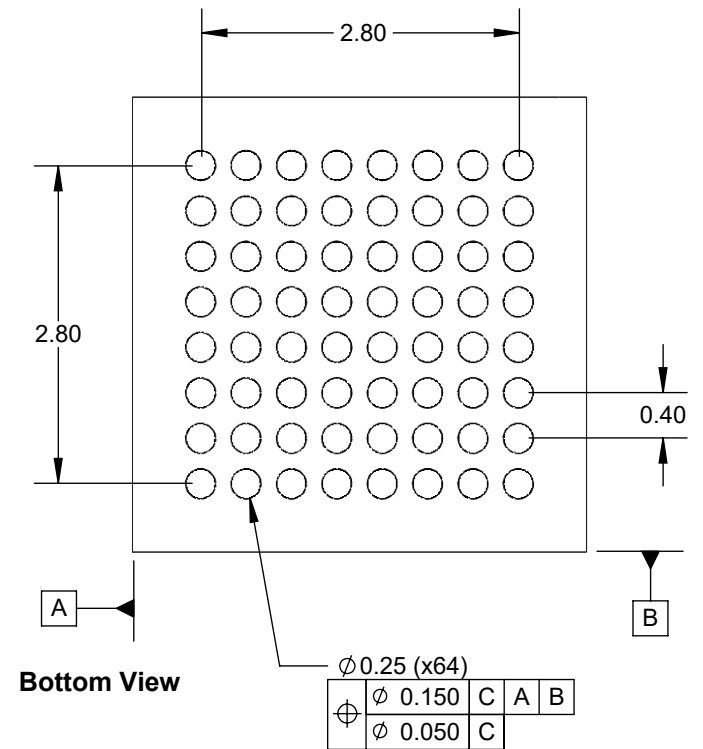
**Ironwood Package Code: BGA64R**



### Top View



### Side View




### Bottom View

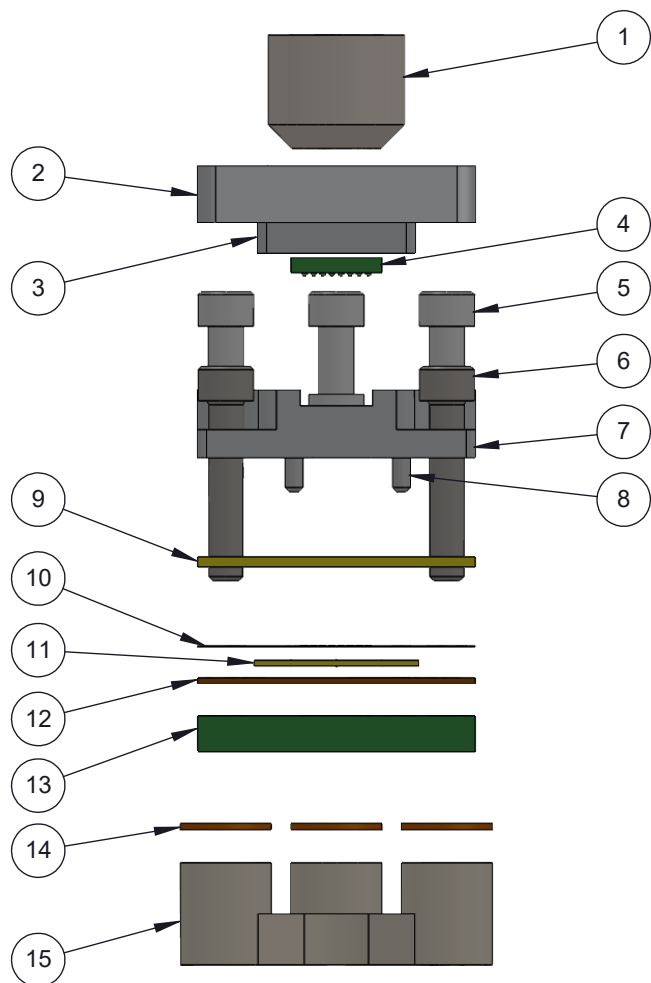
**Array: 8 x 8**

Description: BGA

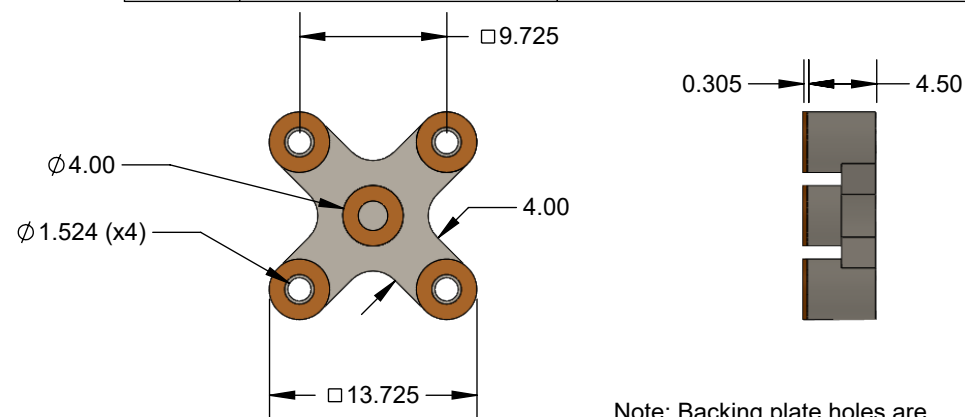
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>SG25-BGA-2018 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a>	Material: N/A Finish: N/A Weight: 4.72	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: M.A. Fedde	DRAWN BY: M. Raske	SCALE: 15:1
		FILE: SG25-BGA-2018 Dwg	DATE: 01/27/2016	



ITEM NO.	Description	Material
1	Compression Screw M6x1 w/2mm thru hole	Stainless Steel (18-8)
2	Socket Lid 7mm	7075-T6 Aluminum Alloy
3	Compression Plate 7mm IC, 1.5mm thick w/ 2mm thru hole	7075-T6 (SN)
4	BGA test chip	Material <not specified>
5	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
6	#0-80 X .313 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
7	Socket Base 7mm	7075-T6 (SN)
8	Alignment Pin 1/32" dia. x 1/8" lng	Chrome Stainless Steel
9	IC (MLF) Guide	Torlon 4203
10	Ball Guide	Kapton Polyimide/Cirlex
11	0.25mm thick 0.05mm pitch 63 deg angled elastomer	SG Elastomer
12	Elastomer guide	Kapton Polyimide/Cirlex
13	Customer's target PCB	FR4 Standard
14	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
15	5 post backing plate	7075-T6 Aluminum Alloy



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

## Description: SOCKET SPEC

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

### SG25-BGA-2018 Drawing



Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 4.72

STATUS: Released

ENG: M.A. Fedde

FILE: SG25-BGA-2018 Dwg

SHEET: 4 OF 4

DRAWN BY: M. Raske

DATE: 01/27/2016

REV. A

SCALE: 4:1

## Insulation plate and Backing plate specification