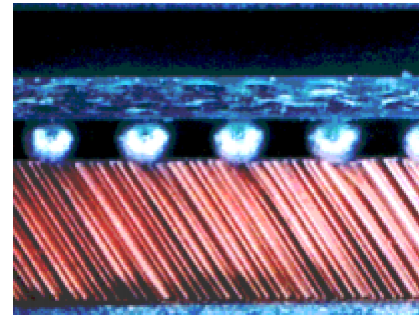
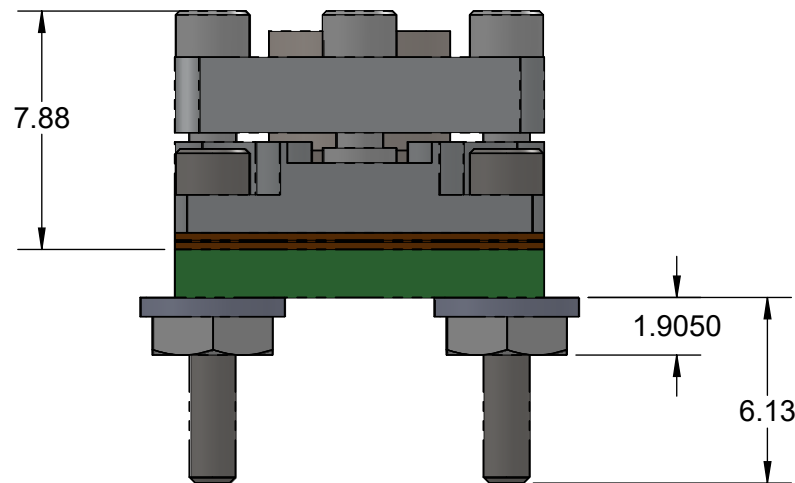
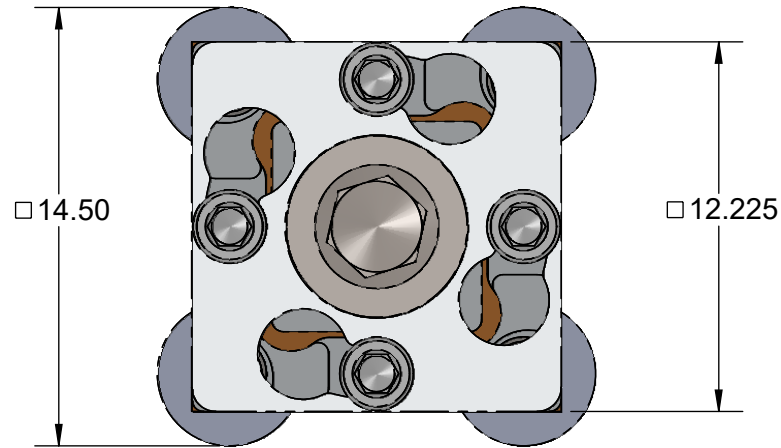


# GHz BGA Socket - Direct mount, solderless

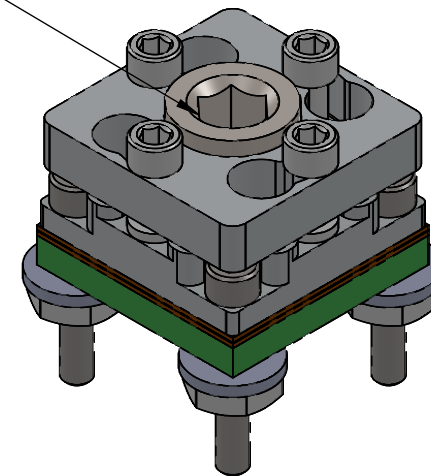
## Features

- 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



Cross-section of BGA compressed on elastomer

**RECOMMENDED TORQUE: 8.5 N-cm [0.75 lbf-in]**



## Description: SG25-BGA 2.76x2.76mm 13x8 array 0.35

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

Tolerances: Hole diameters  $\pm 0.0254\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.0762\text{mm}$  [ $\pm 0.003"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.127\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

### SG25-BGA-2016 Drawing



©2015 Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 4.31

STATUS: Released

ENG: J. Vavra

FILE: SG25-BGA-2016 Dwg

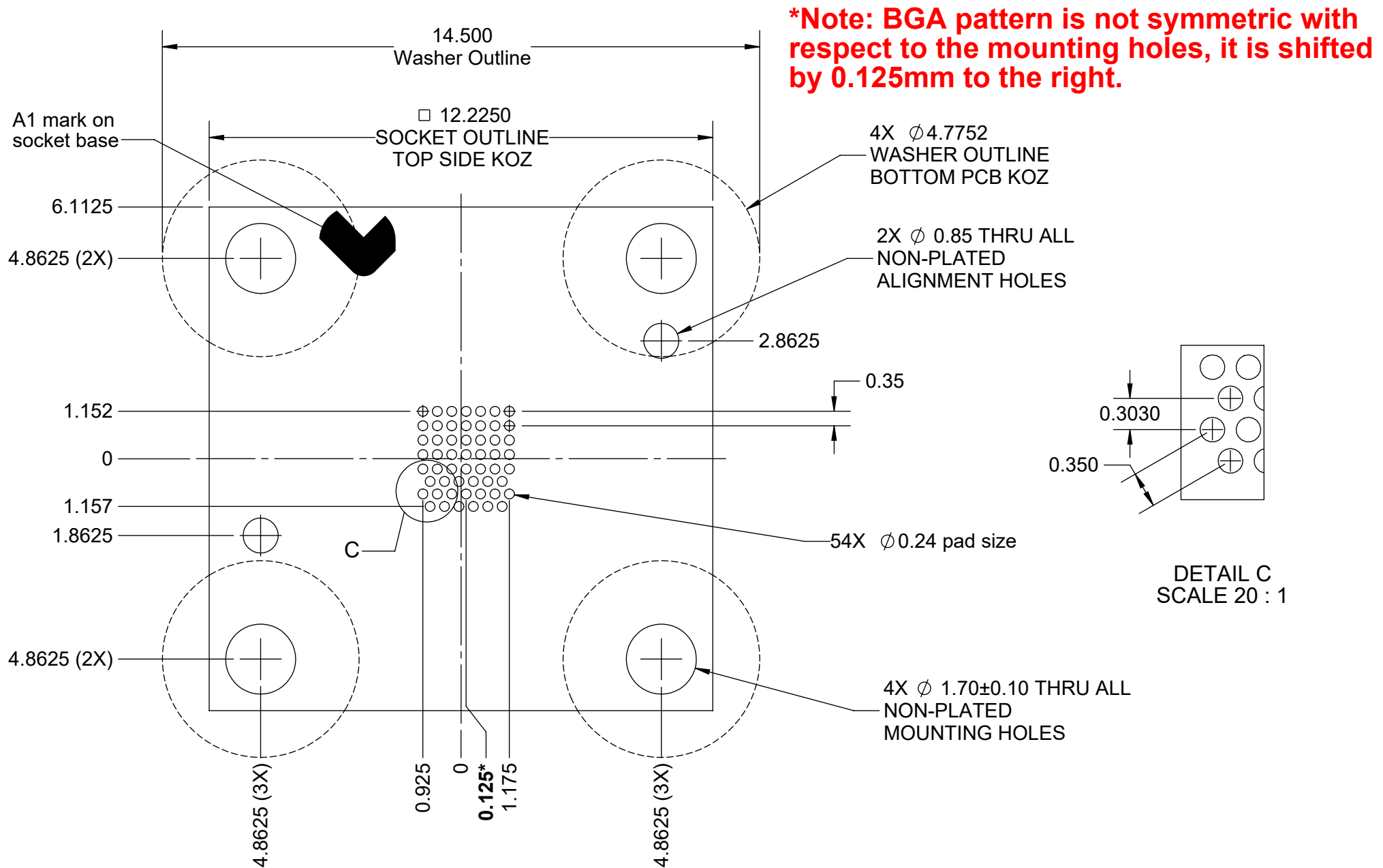
SHEET: 1 OF 4

DRAWN BY: M. Raske

DATE: 11/11/2015

REV. A

SCALE: 4:1



### Description: Recommended PCB Layout

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

Tolerances: Hole diameters  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], Hole and pad positions  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise.  
Materials and specifications are subject to change without notice.

### Target PCB Recommendations:

Total thickness: 1.6mm min.

Plating: Gold or Solder finish

PCB Pad height: Same or higher than solder mask

#### SG25-BGA-2016 Drawing



©2015 Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 4.31

STATUS: Released

ENG: J. Vavra

FILE: SG25-BGA-2016 Dwg

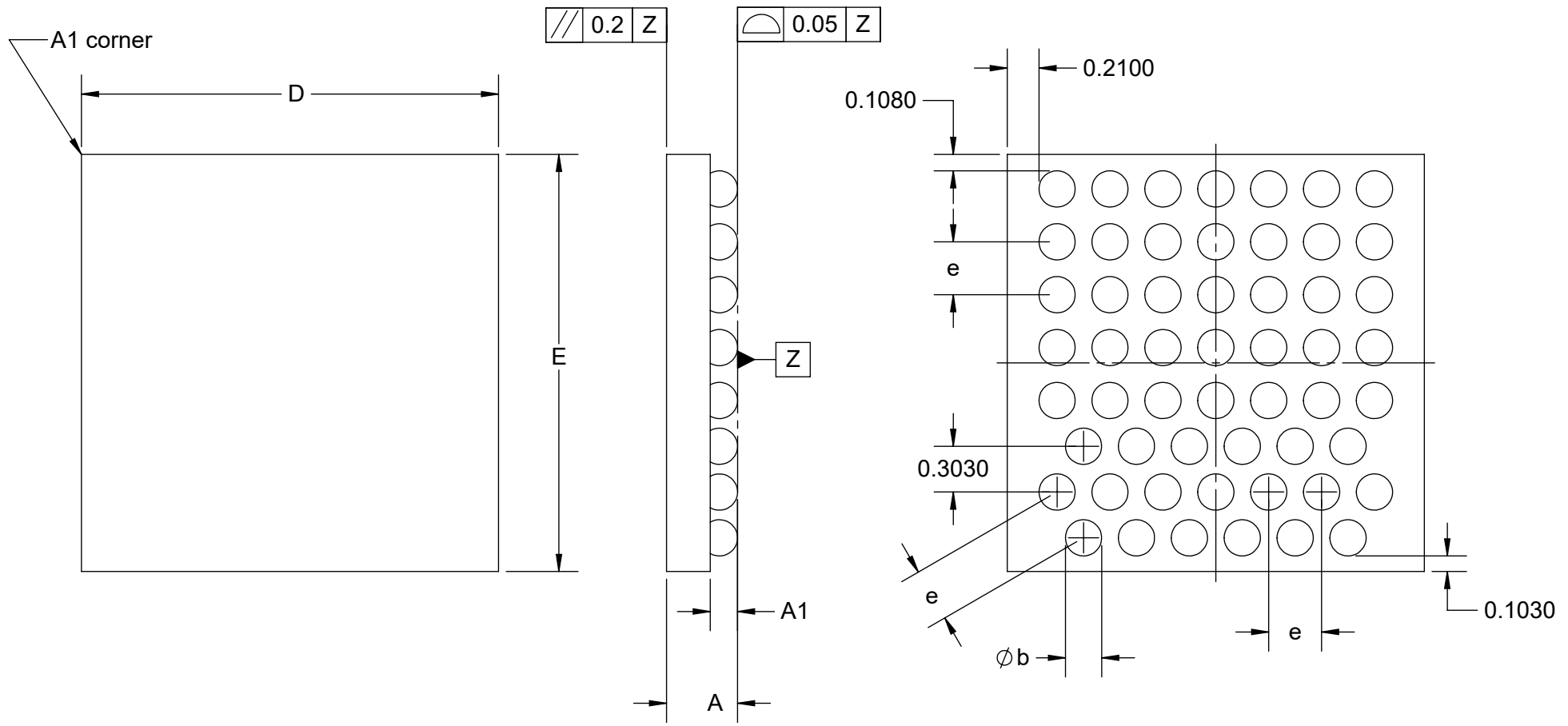
SHEET: 2 OF 4

DRAWN BY: M. Raske

DATE: 11/11/2015

REV. A

SCALE: 8:1



Dimensions are in millimeters.


1. Interpret dimensions and tolerances per ASME Y14.5M-1994.
2. 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.

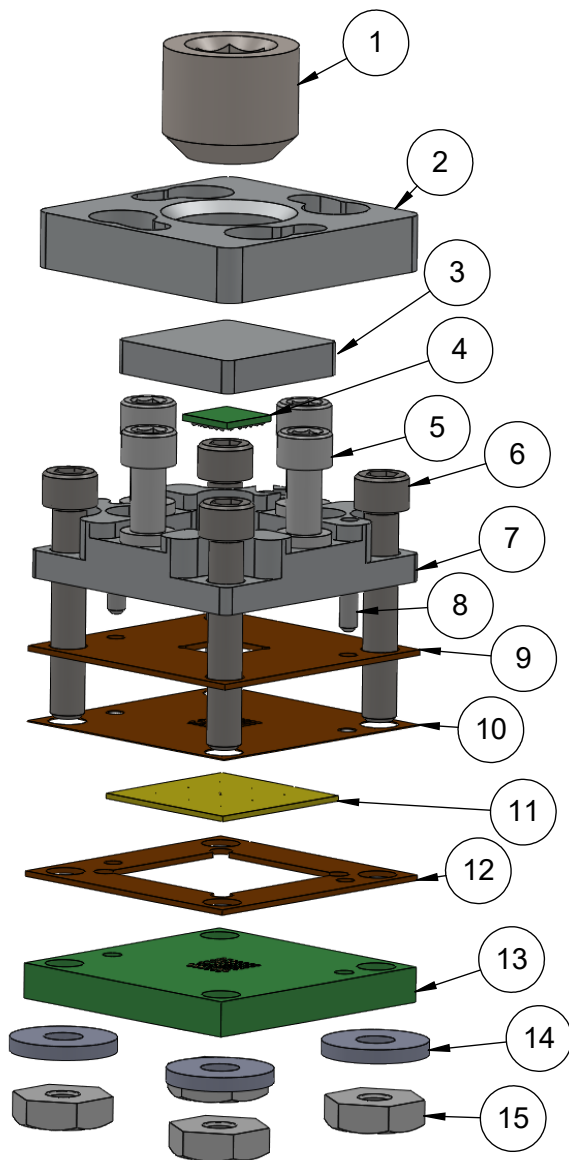
DIM	MIN	MAX
A	0.41	0.53
A1	0.15	0.21
b	0.20	0.28
D	2.72	2.8
E	2.72	2.8
e	0.35	

### Description: Compatible Device

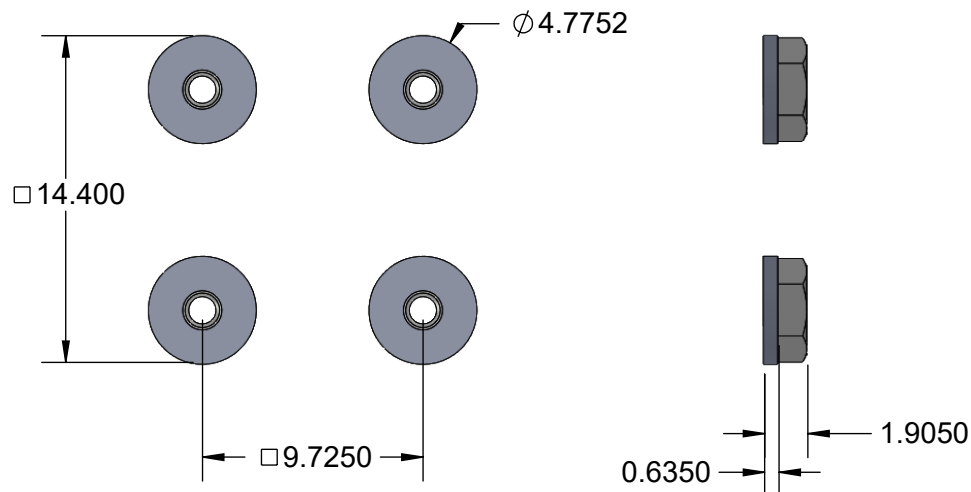
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**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-2016 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 <a href="http://www.ironwoodelectronics.com">www.ironwoodelectronics.com</a>	<b>Material:</b> N/A <b>Finish:</b> N/A <b>Weight:</b> 4.31	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 25:1
		FILE: SG25-BGA-2016 Dwg	DATE: 11/11/2015	



ITEM NO.	DESCRIPTION	Material
1	Compression Screw	Steel
2	Socket Lid	Aluminum
3	Compression Plate	Aluminum
4	Compatible BGA	N/A
5	Shoulder Screw	Steel
6	Mounting Screw	Steel
7	Socket Base	Aluminum
8	Alignment Pin	Steel
9	IC guide	Kapton Polyimide
10	Ball guide	Kapton Polyimide
11	Elastomer	Gold plated brass filaments in silicon rubber
12	Elastomer guide	Kapton Polyimide
13	Target PCB	N/A
14	Washer	Nylon
15	Nut	Steel




## Description: Socket, Backing Plate Detail

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.

## WASHERS/NUTS MOUNTING POSITION DETAIL

	<b>SG25-BGA-2016 Drawing</b> ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 4.31	STATUS: Released	SHEET: 4 OF 4	REV. A
			ENG: J. Vavra	DRAWN BY: M. Raske	SCALE: 3:1
			FILE: SG25-BGA-2016 Dwg	DATE: 11/11/2015	