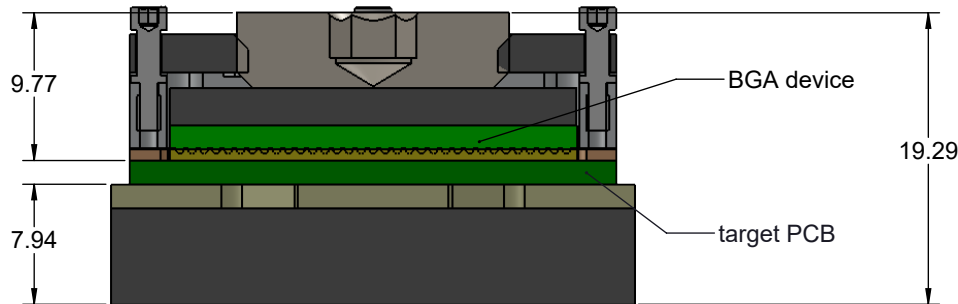
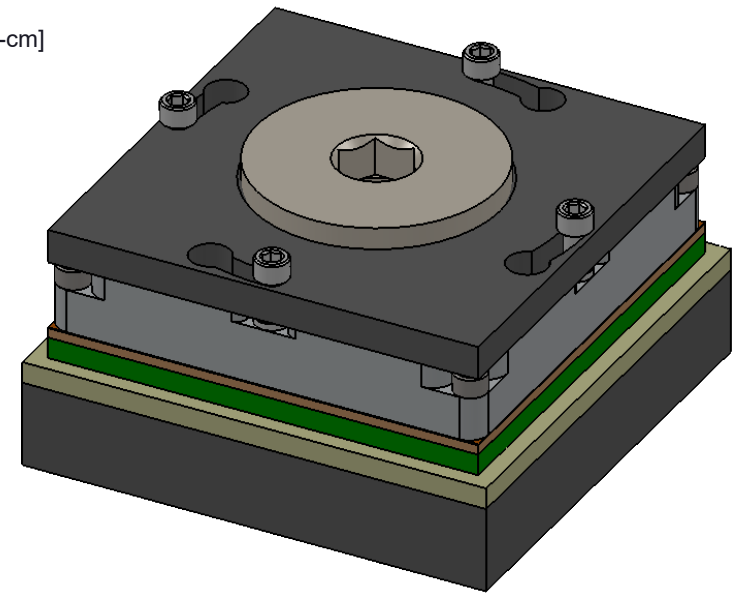
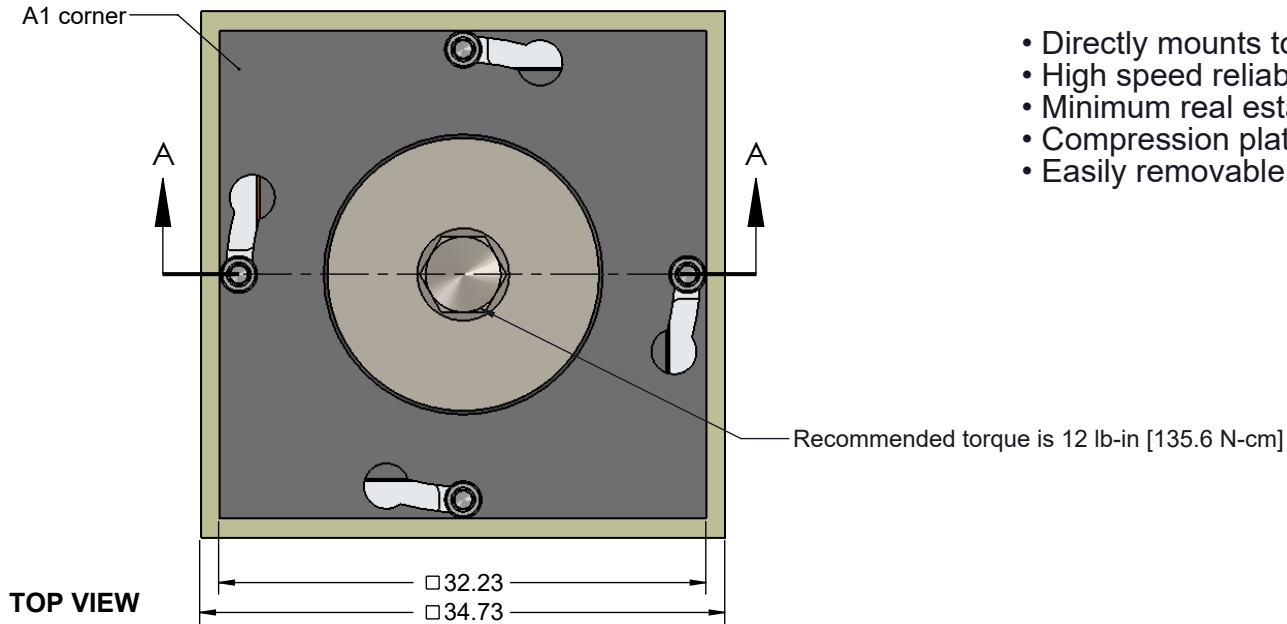


# GHz BGA Socket - Direct mount, solderless

## 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
- Easily removable swivel socket lid



## SECTION A-A

### Description: SG-BGA FOR 27X27MM 0.8MM 33X33 ARY

Primary dimension units are millimeters, Secondary dimension units are [inches].

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.

#### SG-BGA-6356 Drawing



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

Material: N/A  
Finish: N/A  
Weight: 46.21

STATUS: Released

DRAWN BY: M. Raske

FILE: SG-BGA-6356 Dwg

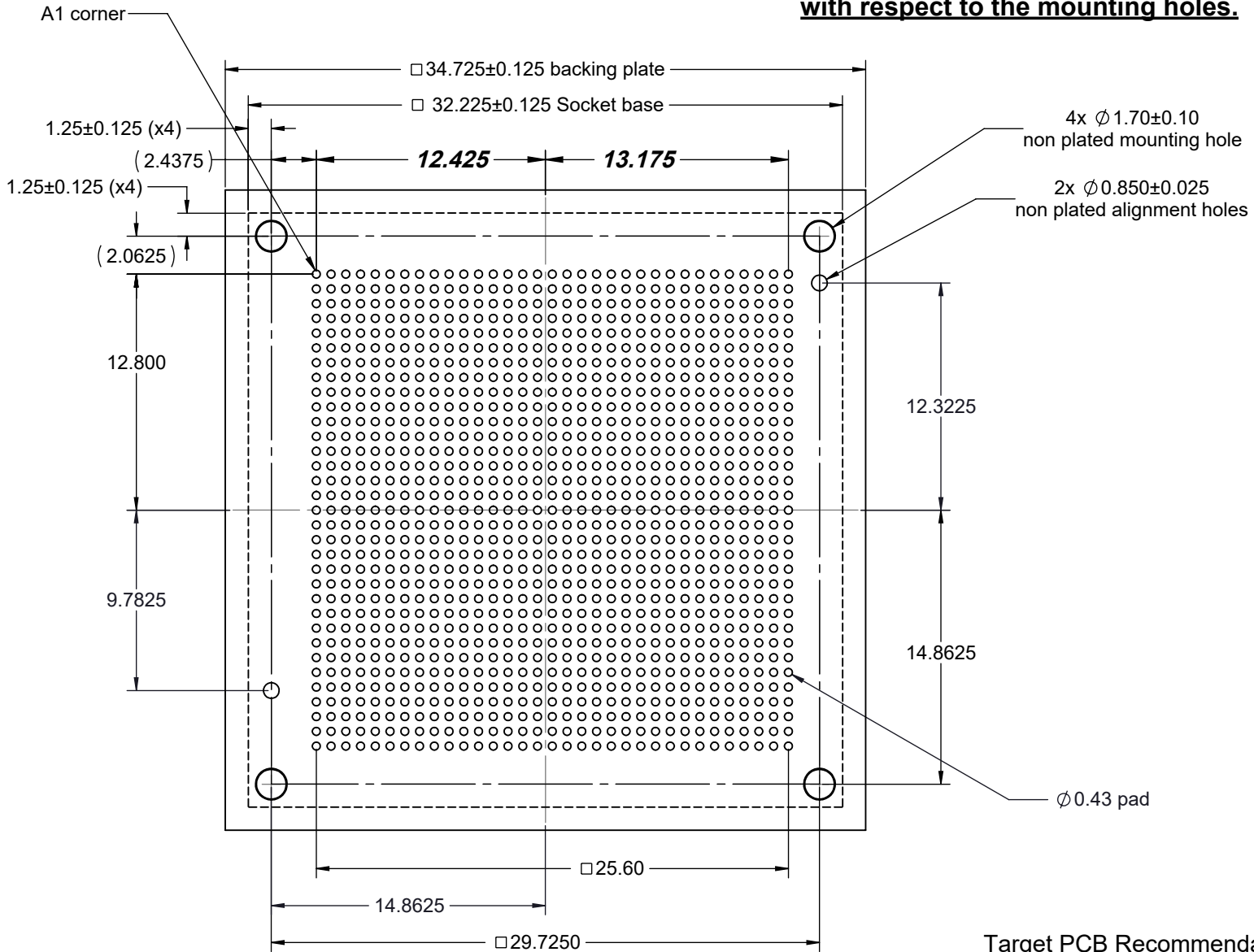
SHEET: 1 OF 4

SCALE: 2:1

DATE: 7/2/2015

REV. A


**\*Note: BGA pattern is not symmetrical with respect to the mounting holes.**



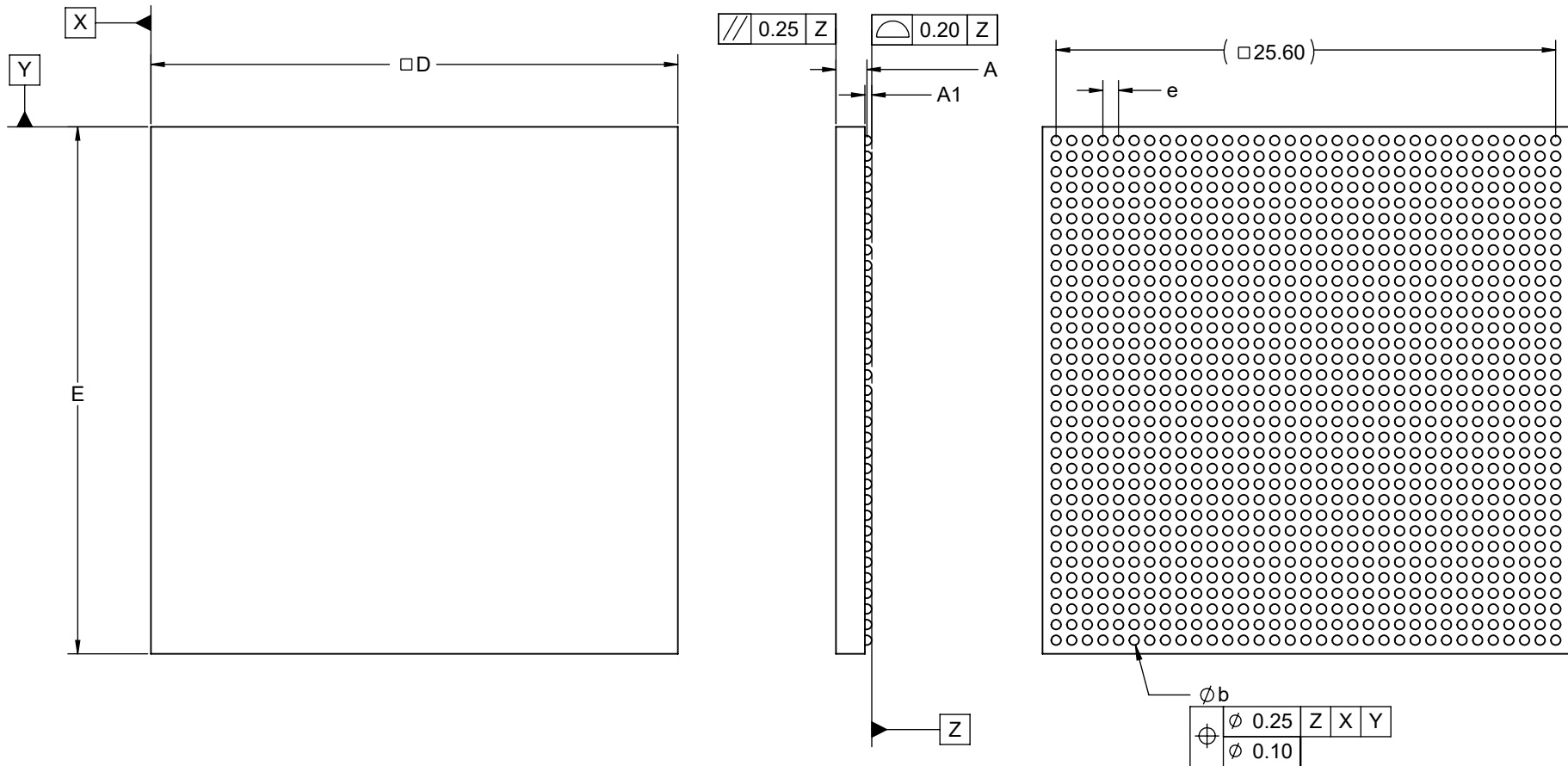
**Target PCB Recommendations**  
 Total thickness: 1.5mm min.  
 Plating: Gold or Solder finish

**Description: Recommended PCB layout**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.  
 Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001''$ ], 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.

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 46.21	STATUS: Released	SHEET: 2 OF 4	REV. A
		DRAWN BY: M. Raske	SCALE: 3:1	
		FILE: SG-BGA-6356 Dwg	DATE: 7/2/2015	

# Ironwood Package Code: BGA1024C



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	2.57	3.17
A1	0.30	0.50
b	0.40	0.60
D	27.00 BSC	
E	27.00 BSC	
e	0.8 BSC	

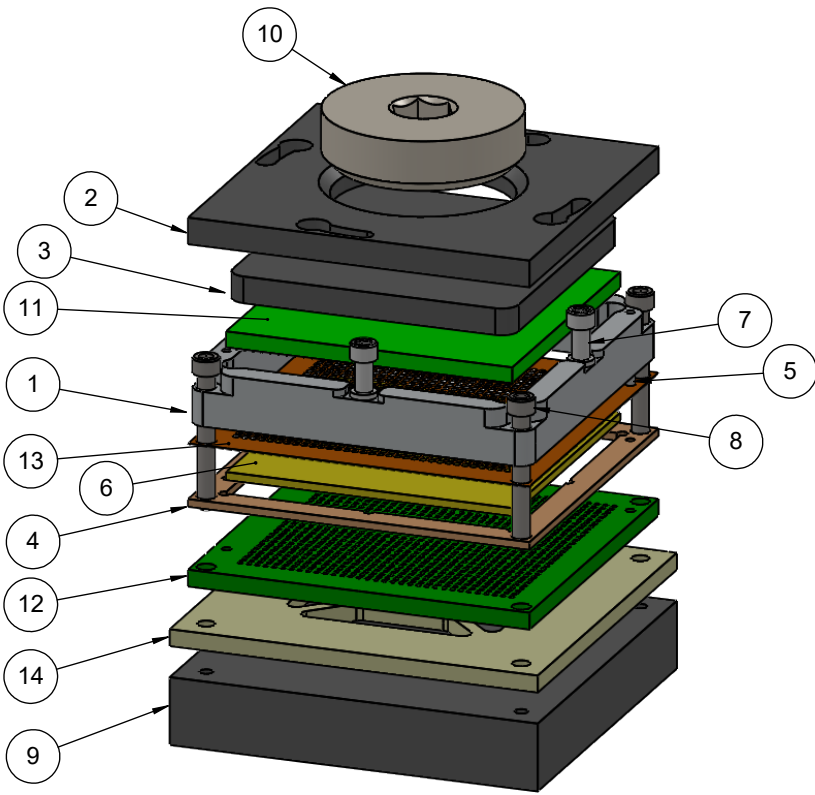
33 x 33 array

## Description: BGA

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

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

 <b>SG-BGA-6356 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 46.21	STATUS: Released	SHEET: 3 OF 4	REV. A
		DRAWN BY: M. Raske	SCALE: 3:1	
		FILE: SG-BGA-6356 Dwg	DATE: 7/2/2015	



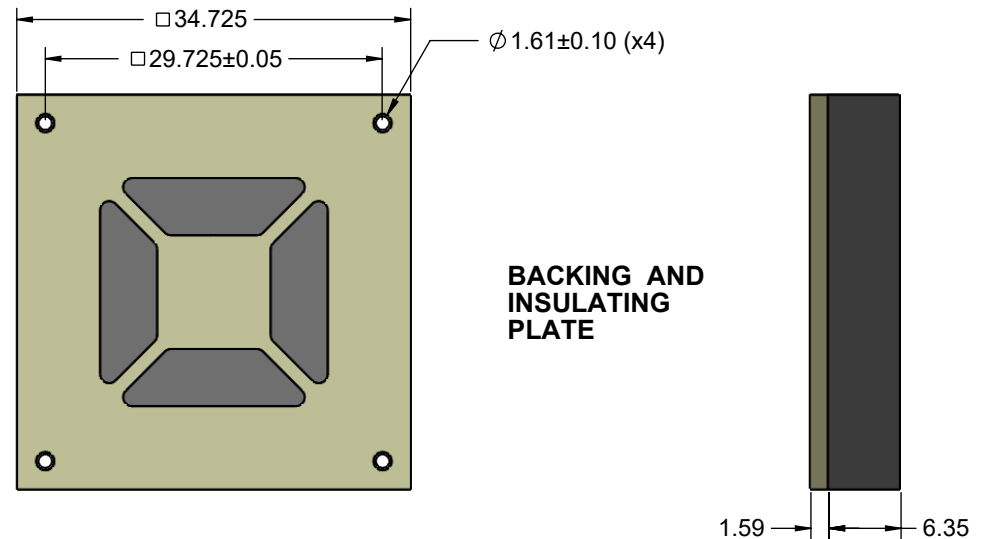
ITEM NO.	DESCRIPTION	Material
1	Socket Base, 32.225 X 32.225	7075-T6 Aluminum Alloy
2	Socket Lid, 32.225 X 32.225	7075-T6 Aluminum Alloy
3	Compression Plate, 26.95 X 26.95	7075-T6 Aluminum Alloy
4	Elastomer Guide 27mm IC	Ultem 1000
5	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
6	Elastomer 0.75mm thick 40 Micron gold plated filaments arranged symmetrically in a silicone rubber( 63.5 degree angle)	20 Micron dia gold plated brass filaments arranged symettrically in a silicon rubber (63.5 degree angle)
7	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
8	#0-80 x 0.5, SH Cap Screw	Alloy Steel
9	Backing Plate, 34.725 X 34.725	7075-T6 Aluminum Alloy
10	Compression Screw, M18	7075-T6 Aluminum Alloy
11	BGA 27mm 0.8mm pitch 33x33 array	Material <not specified>
12	SG-BGA FOR 27X27MM 0.8MM 33X33 ARY	FR4 Standard
13	Ball Guide 27x27mm, 0.8mm, 33x33 array	Kapton Polyimide/Cirlex
14	Insulation Plate 27mm IC	FR4


Rev	Date	Initials	Description
A	12/9/11	SH	Original
B	1/17/12	SH	1. Updated torque to 12 in lbs from 10.19 in lbs 2. Reomved mold cap from the chip per customer request
C	7/2/15	MR	VW to SW

### Description: Skt, Insulation Plate, Pin Det

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

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



 <b>SG-BGA-6356 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 46.21	STATUS: Released DRAWN BY: M. Raske FILE: SG-BGA-6356 Dwg	SHEET: 4 OF 4 SCALE: 3:2 DATE: 7/2/2015	REV. A
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