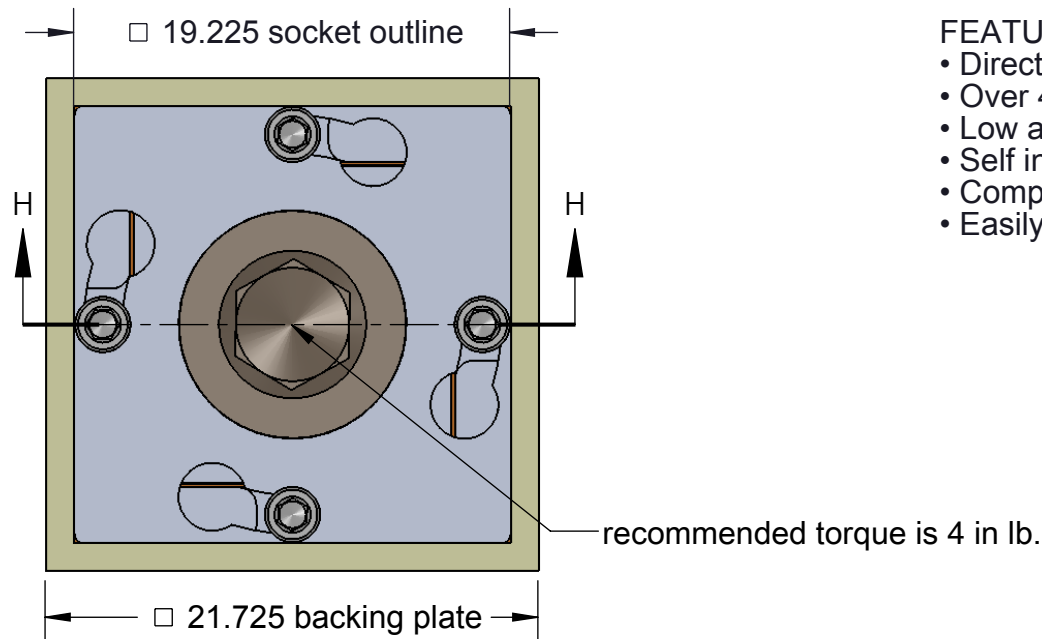
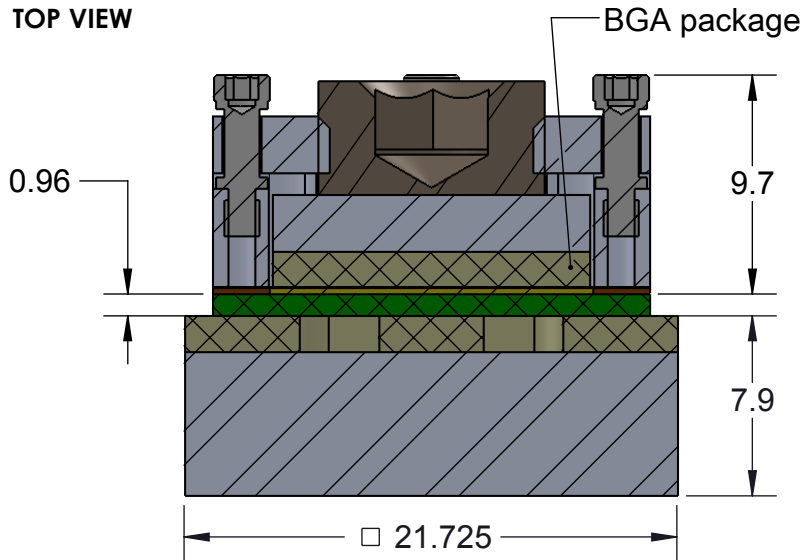


0.25mmGHz BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR TEST APPLICATIONS



TOP VIEW



SECTION H-H

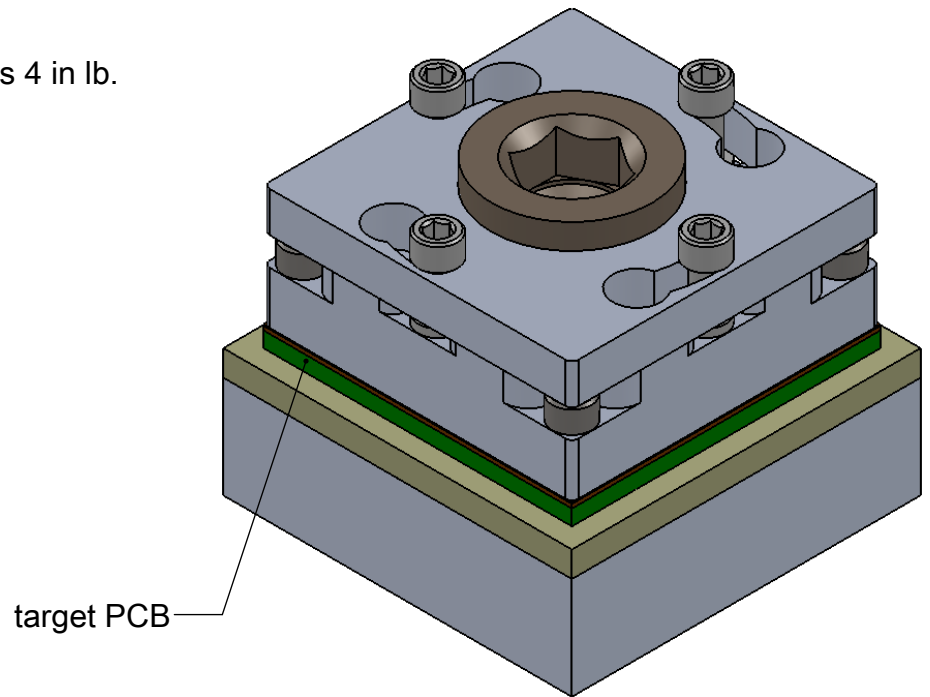
Description: SG25-BGA 14x14mm, 34x34 0.4mm pitch

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.

FEATURES:

- Directly mounts to target PCB (needs tooling holes) with hardware.
- Over 40GHz bandwidth @-1dB
- Low and stable contact resistance for reliable production yield.
- Self inductance under 0.05nH.
- Compression plate distributes forces evenly
- Easily removable swivel socket lid



SG25-BGA-2000 Drawing



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

Material: Material <not specified>
Finish:
Weight: 17.17

STATUS: Released

ENG: V. Panavala

FILE: SG25-BGA-2000

SHEET: 1 OF 4

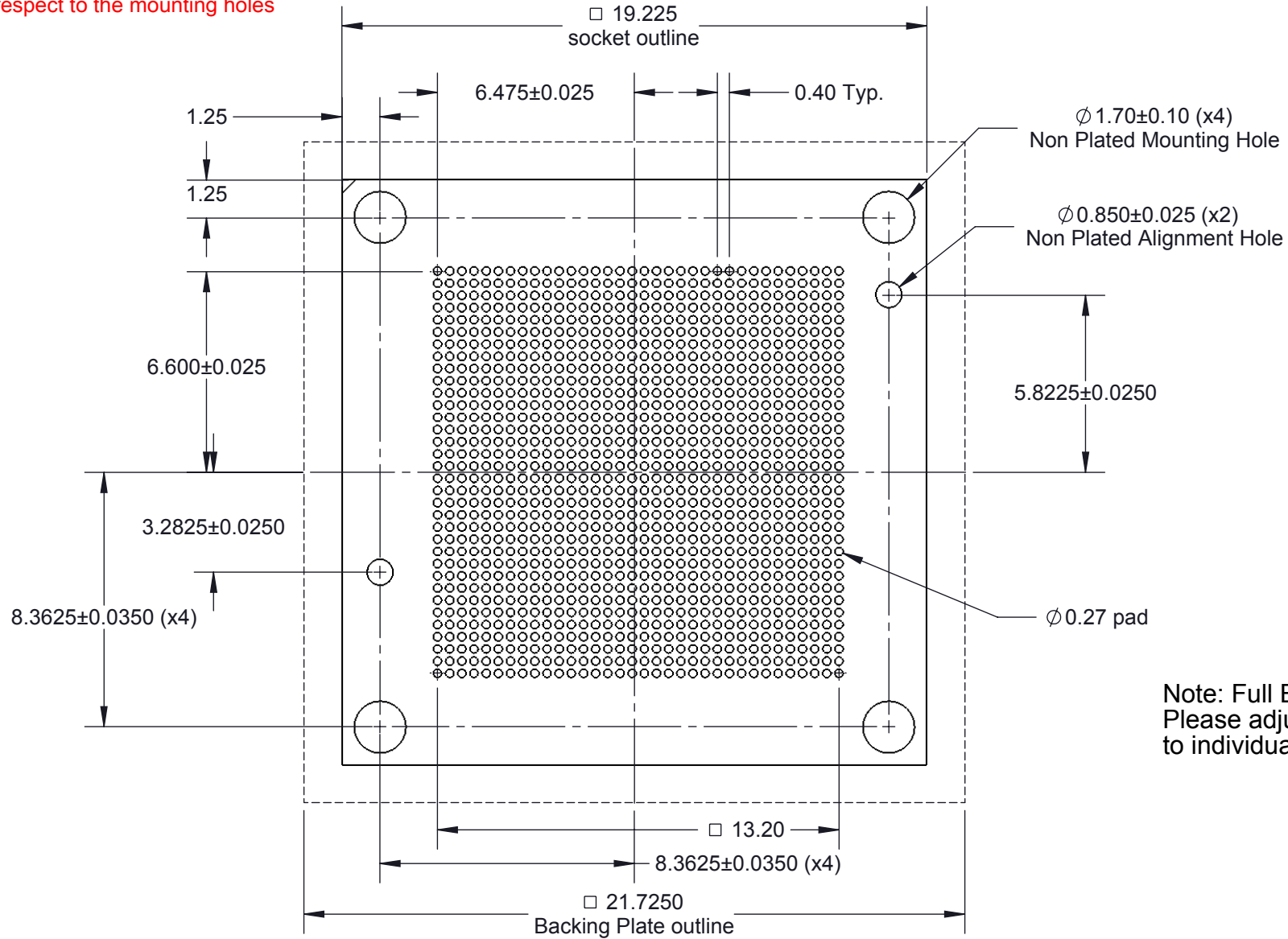
DRAWN BY: V. Panavala

DATE: 1/10/2015

REV. B

SCALE: 3:1

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



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

Target PCB Recommendations

Total thickness: 1.6mm min.

Plating: ENIPIG, Solder Finish, Hard Gold


PCB Pad height: Same or 0.001"-0.002" lower than solder mask

Solder mask opening: 0.014"

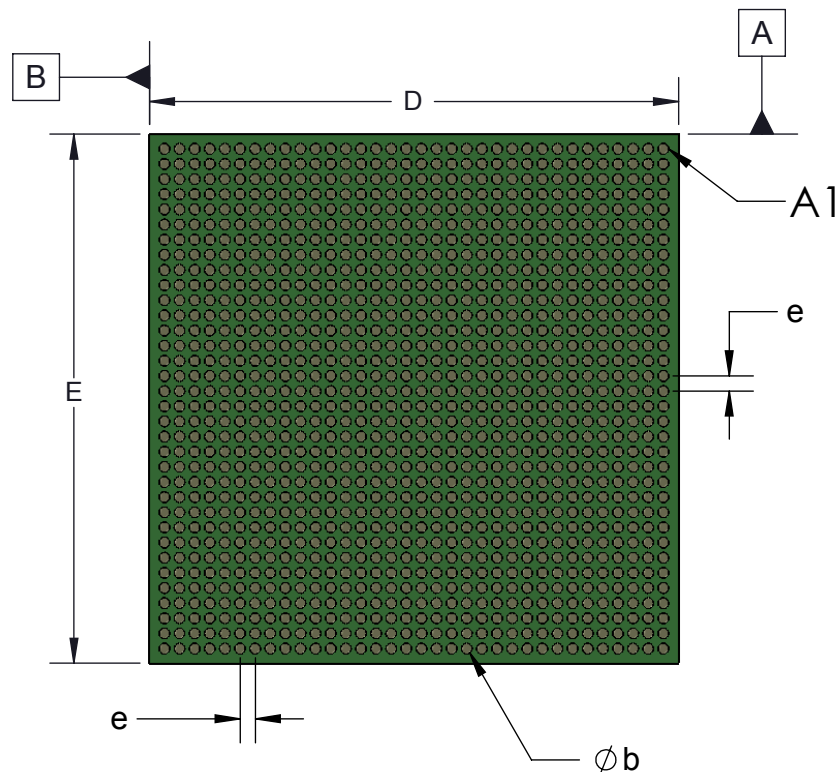
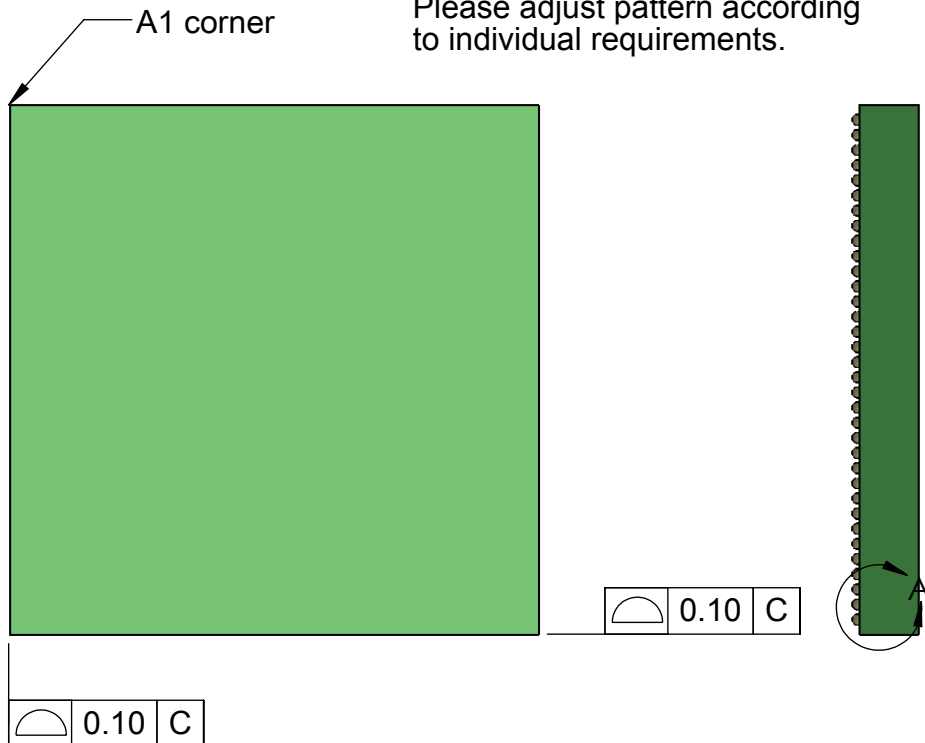
Description: Recommended PCB Layout

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.

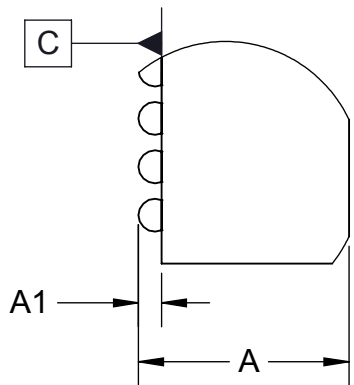
 <p>SG25-BGA-2000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Material <not specified> Finish: Weight: 17.17</p>	STATUS: Released	SHEET: 2 OF 4	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 5:1
		FILE: SG25-BGA-2000	DATE: 1/10/2015	

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



\oplus	ϕ 0.15 (M)	C	A	B
\oplus	ϕ 0.05 (M)	C		

Ironwood package code: **BGA1156B**




DETAIL A
SCALE 16 : 1

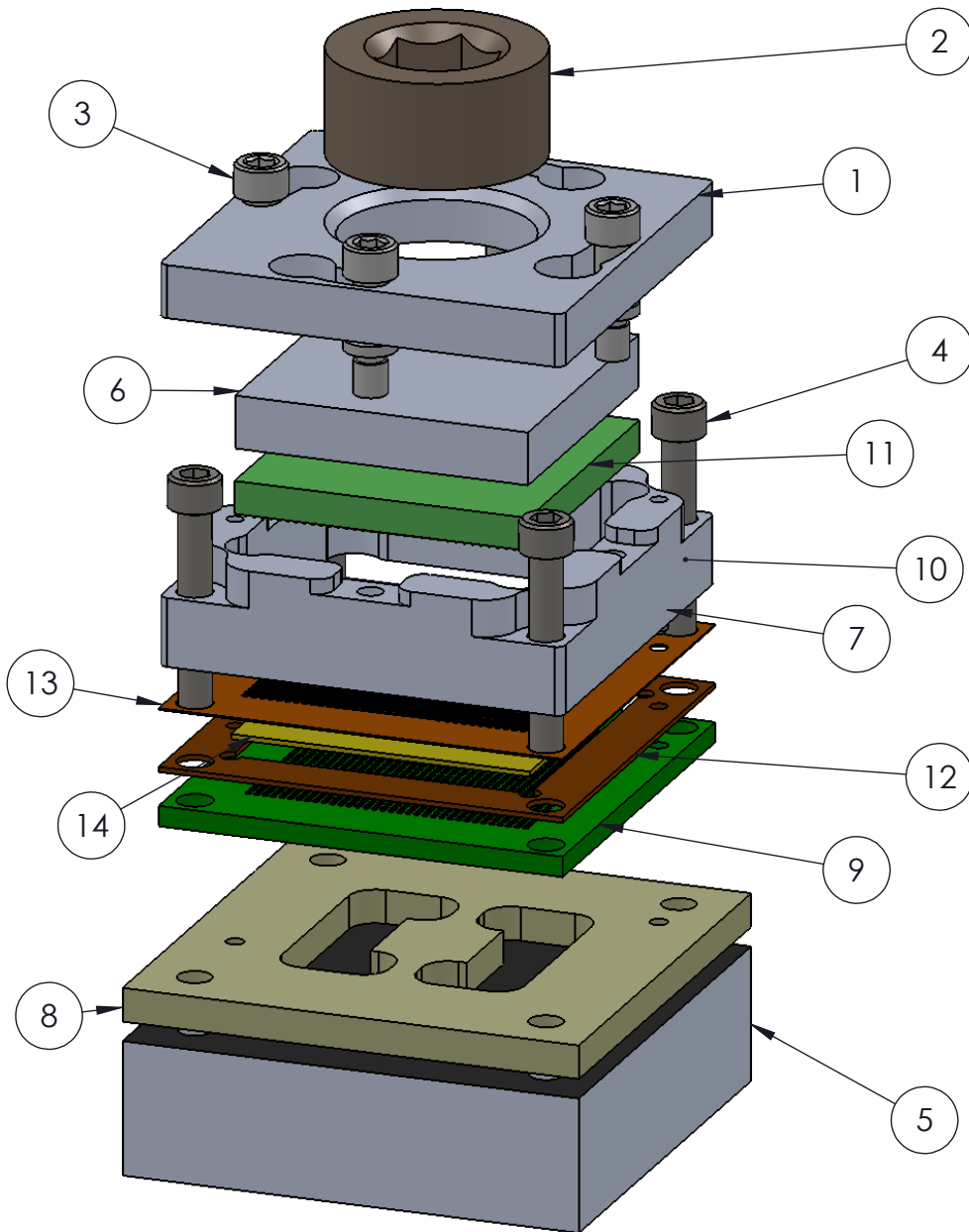
DIM	Minimum	Maximum
A		1.59
A1	0.15	0.23
b	0.20	0.30
D	14.0 BSC	
E	14.0 BSC	
e	0.4	
ARRAY	34x34	
PIN COUNT	1156	

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 C.
4. Datum C (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.

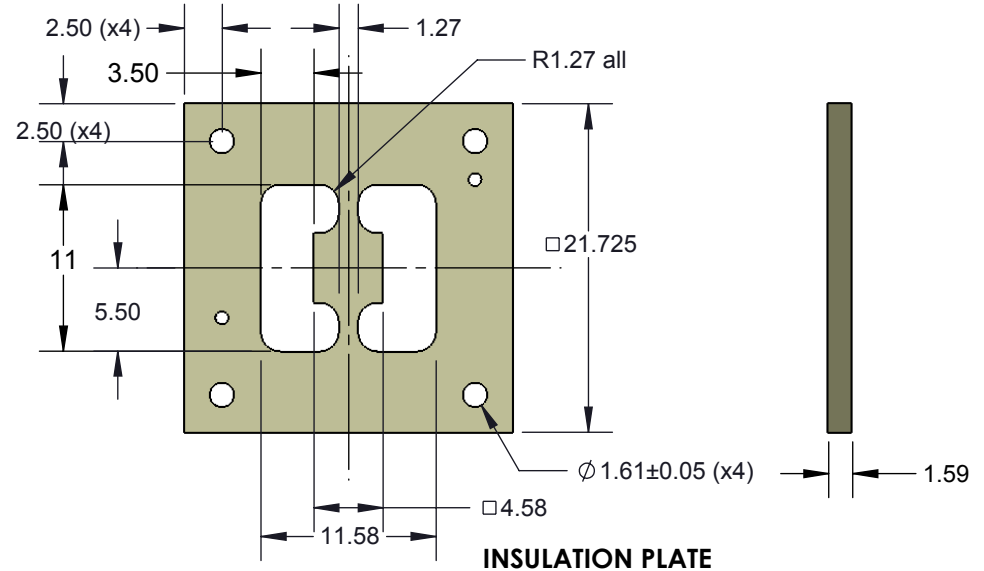
Description: Compatible BGA

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

 <p>SG25-BGA-2000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Material <not specified> Finish: Weight: 17.17</p>	STATUS: Released	SHEET: 3 OF 4	REV. B
		ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 5:1
		FILE: SG25-BGA-2000	DATE: 1/10/2015	



ITEM NO.	Description	Material
1	GHz Swivel Socket Lid, 14mm IC	7075-T6 Aluminum Alloy
2	Compression Screw M10	7075-T6 Aluminum Alloy
3	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
4	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
5	Backing Plate, 21.725 X 21.725	7075-T6 Aluminum Alloy
6	Compression Plate, 13.95 X 13.95	7075-T6 Aluminum Alloy
7	Alignment Pin 1/32" dia. x 1/8" lng	Chrome Stainless Steel
8	Insulation Plate	FR4 Standard
9	PCB 14x14mm, 34x34 0.4mm pitch 0.125mm offset	Material <not specified>
10	Socket Base BGA 14x14	7075-T6 Aluminum Alloy
11	Customer's BGA 0.4mm pitch 34x34 array 14mm	High Temp FR4
12	Elastomer Guide 14mm IC 0.25mm thk	Kapton Polyimide/Cirlex
13	Ball guide 34x34 0.4mm pitch	Kapton Polyimide
14	0.25mm thick, 0.05x 0.05mm pitch, 50mm sqr, Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symetically in a silicon rubber (63.5 degree angle), Thickness: 0.5mm



Description: Socket Specification

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-2000 Drawing



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

Material: Material <not specified>
 Finish:
 Weight: 17.17

STATUS: Released

ENG: V. Panavala

FILE: SG25-BGA-2000

SHEET: 4 OF 4

DRAWN BY: V. Panavala

DATE: 1/10/2015

REV. B

SCALE: 1:1

Rev	Date	Initials	Description
B	5/28/15	MR	Added radius to socket base edges