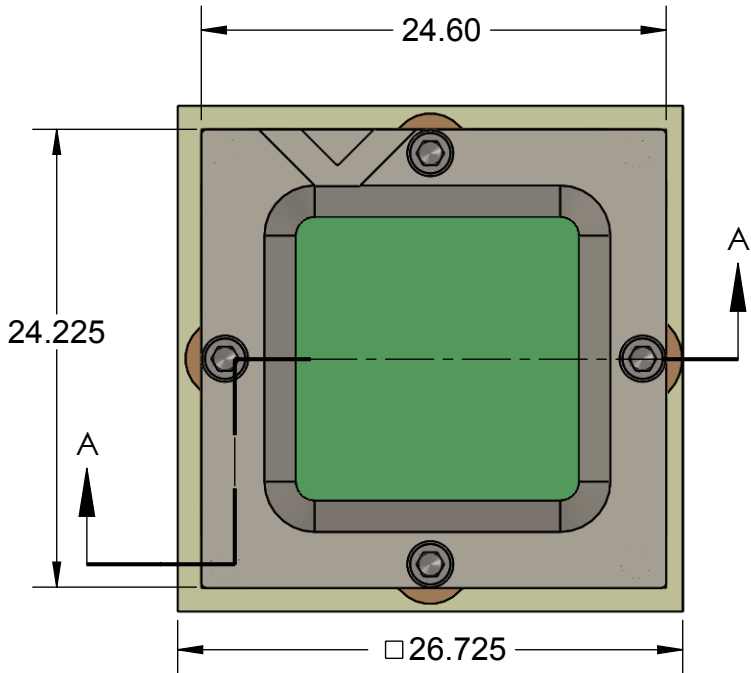


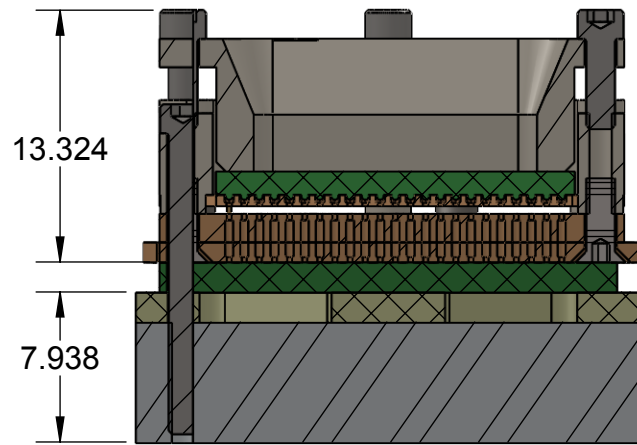
# SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



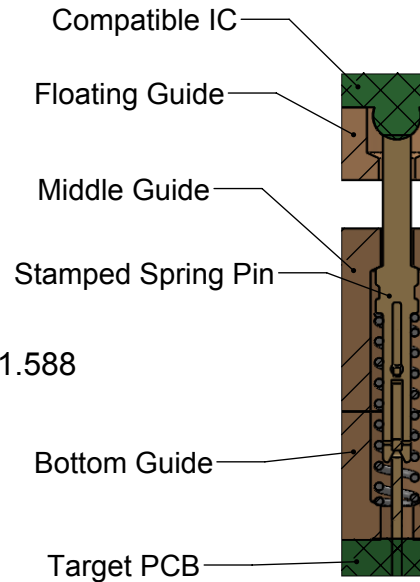
## Features

- Wide temperature range (-55C to +180C)
- High current capability (up to 4A)
- Excellent signal integrity at high frequencies
- Low and stable contact resistance for reliable production yield
- Highly compliant to accommodate wide co-planarity variations
- Automated probe manufacturing enables low cost and short lead time

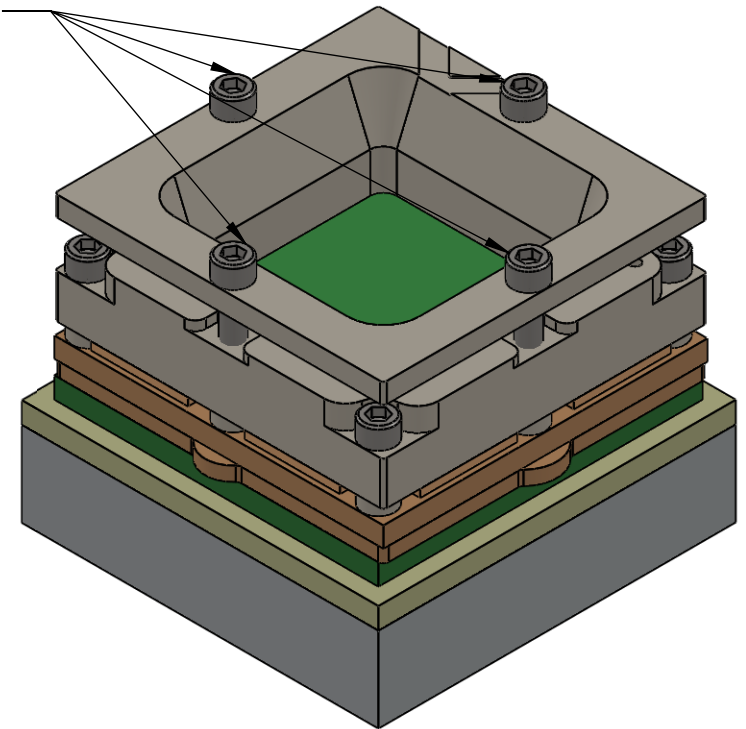
Gradually tighten alternate screws until floating guide contacts middle guide



SECTION A-A




Contactor Detail



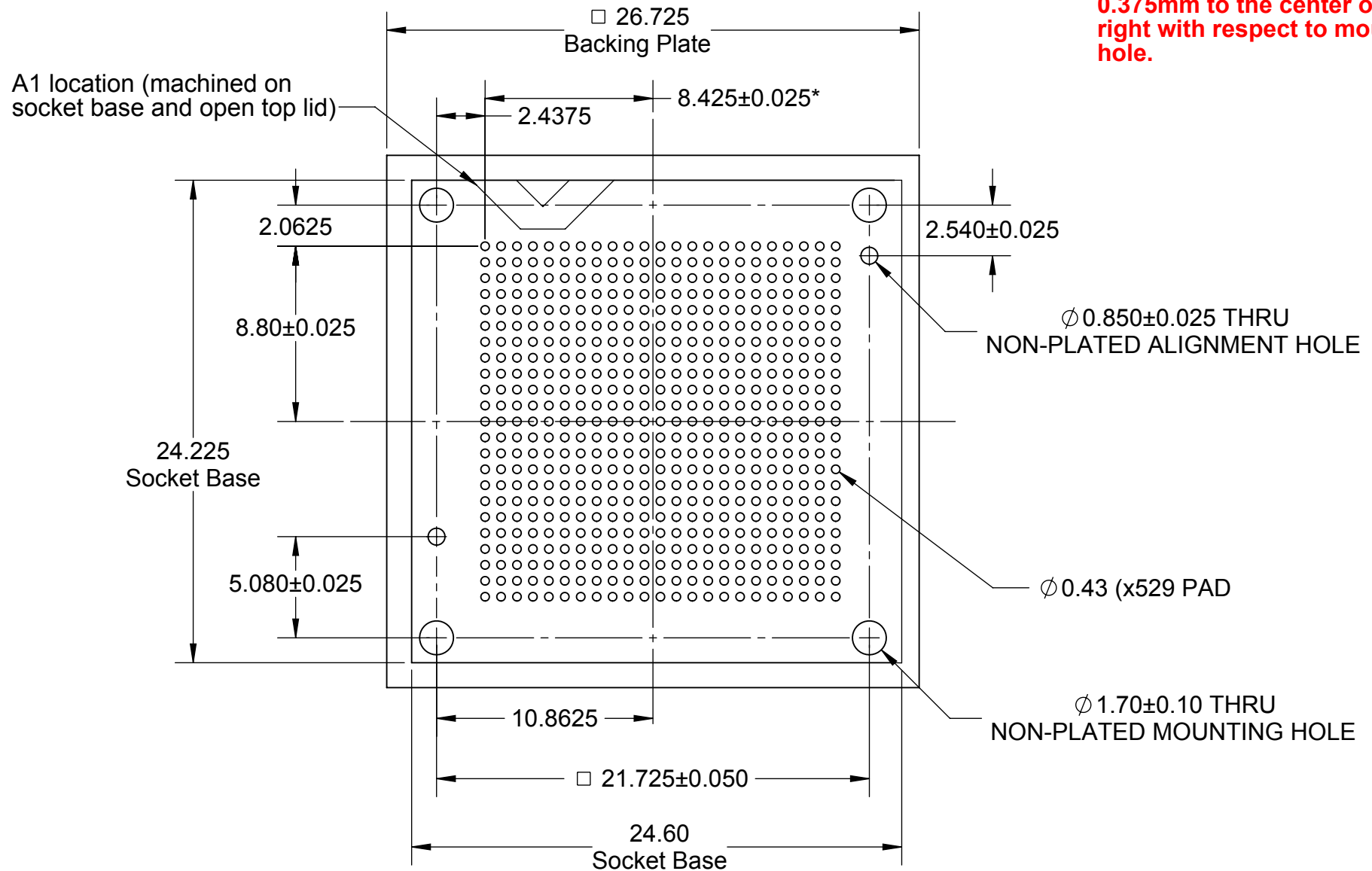
## Description: SBT-BGA529 19mm 23x23 0.8 OT

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>SBT-BGA-6519 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 24.93	STATUS: Released	SHEET: 1 OF 4	REV. A
		ENG: B. Schatz	DRAWN BY: M. Raske	SCALE: 5:2
		FILE: SBT-BGA-6519 Dwg	DATE: 10/21/2014	


**\*Note: BGA pattern is not symmetrical with respect to the mounting holes. It is shifted 0.375mm to the center of the right with respect to mounting hole.**

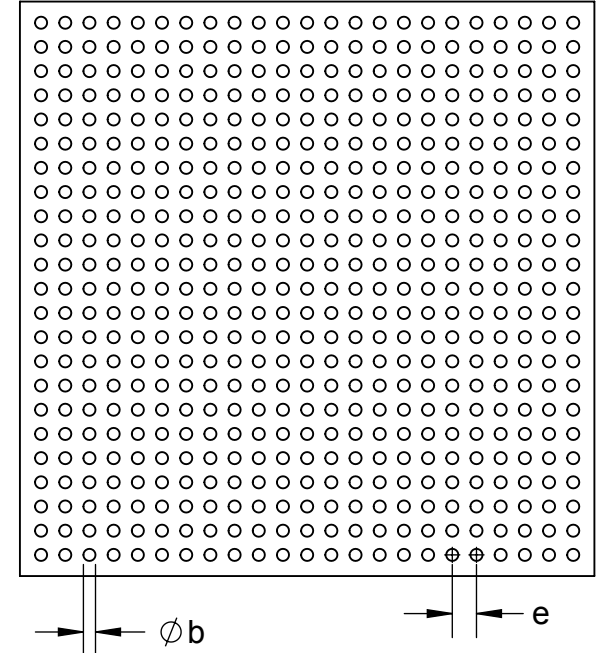
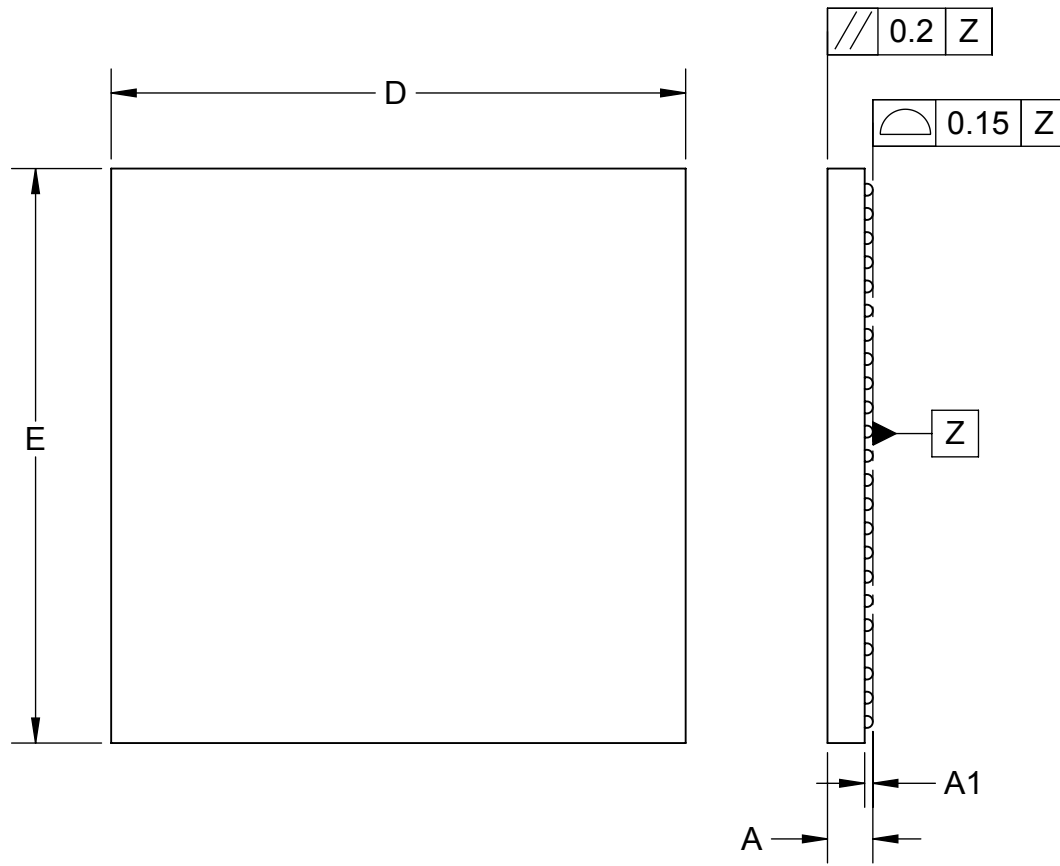


**Description: Recommended PCB Layout**

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.

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

 <b>SBT-BGA-6519 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 24.93	STATUS: Released	SHEET: 2 OF 4	REV. A
		ENG: B. Schatz	DRAWN BY: M. Raske	SCALE: 7:2
		FILE: SBT-BGA-6519 Dwg	DATE: 10/21/2014	



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.


DIM	Minimum	Maximum
A	1.0	3.0
A1	0.20	0.34
b	0.35	0.45
D	18.8	19.2
E	18.8	19.2
e	0.8 BSC	

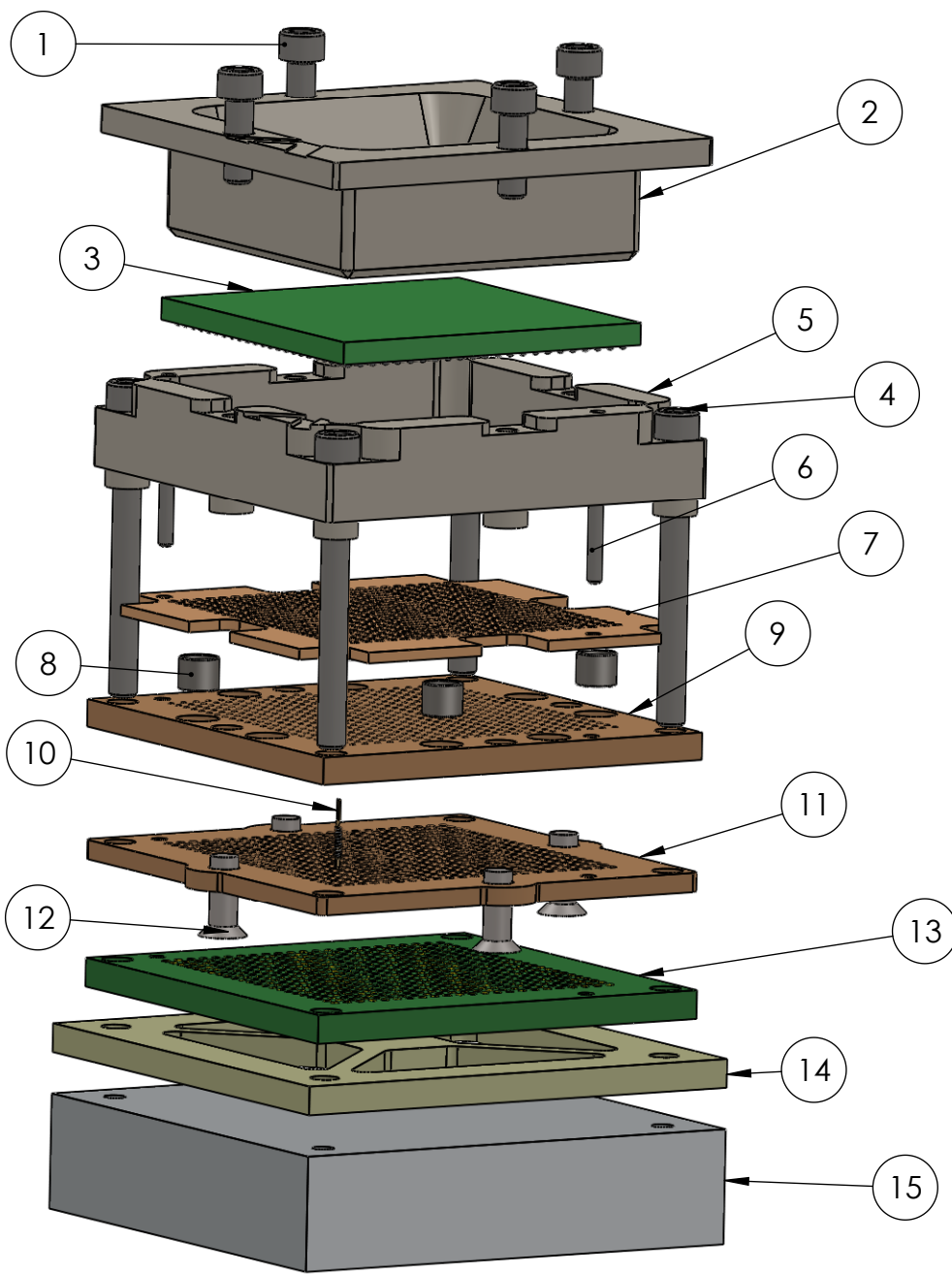
**Description: BGA**

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.

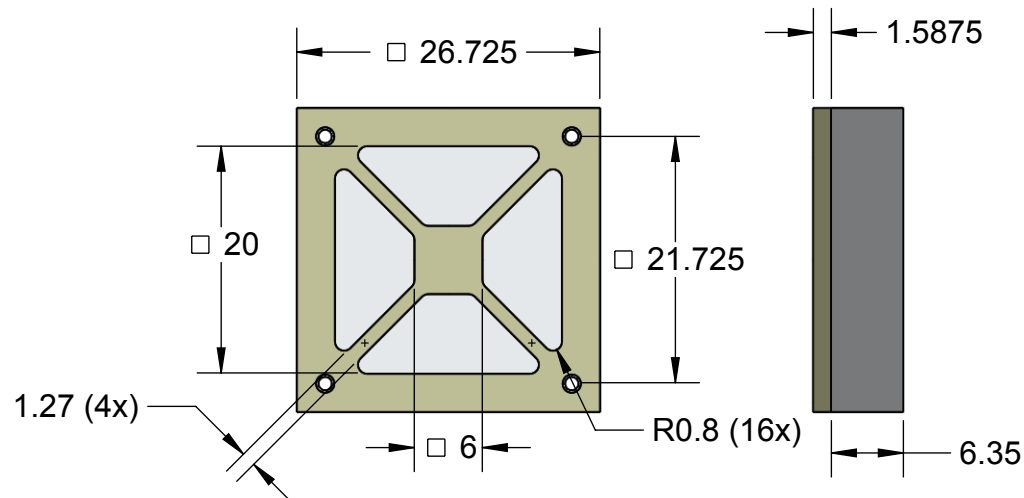
**Array: 23x23**

 SBT-BGA-6519 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 24.93	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: B. Schatz	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SBT-BGA-6519 Dwg	DATE: 10/21/2014	



**PIN DETAIL  
SCALE 16:1**


ITEM NO.	DESCRIPTION	Material
1	Socket Lid Screw	Stainless Steel
2	Open Top Lid	Aluminum Alloy
3	Compatible BGA	N/A
4	Mounting Screw	Stainless Steel
5	Socket Base	Aluminum Alloy
6	Dowel pin	Stainless Steel
7	Floating Guide	Semitron MDS 100
8	Floating Guide Spring	Stainless Steel
9	Middle Guide	Semitron MDS 100
10	Stamped Spring Pin	Beryllium Copper/ Gold Plated
11	Bottom Guide	Semitron MDS 100
12	Pin Guide Screw	Peek unfilled
13	Target PCB	N/A
14	Insulation Plate	FR4
15	Backing Plate	Aluminum Alloy



**Insulation and Backing Plate Specification**

**Description: Socket Material Info**

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>SBT-BGA-6519 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A	STATUS: Released	SHEET: 4 OF 4	REV. A
	Finish: N/A	ENG: B. Schatz	DRAWN BY: M. Raske	SCALE: 5:2
	Weight: 24.93	FILE: SBT-BGA-6519 Dwg	DATE: 10/21/2014	