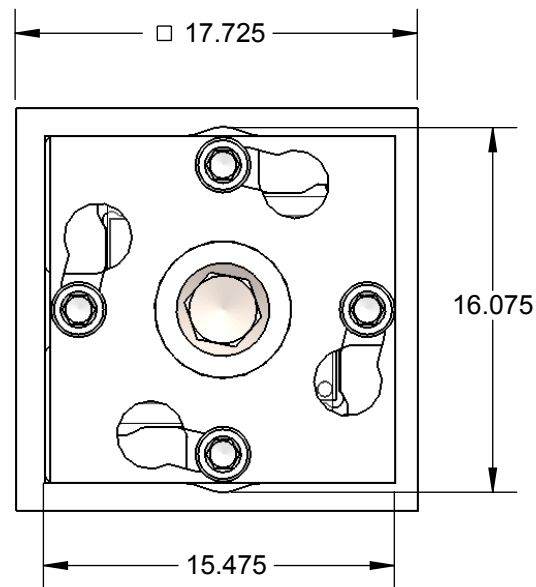
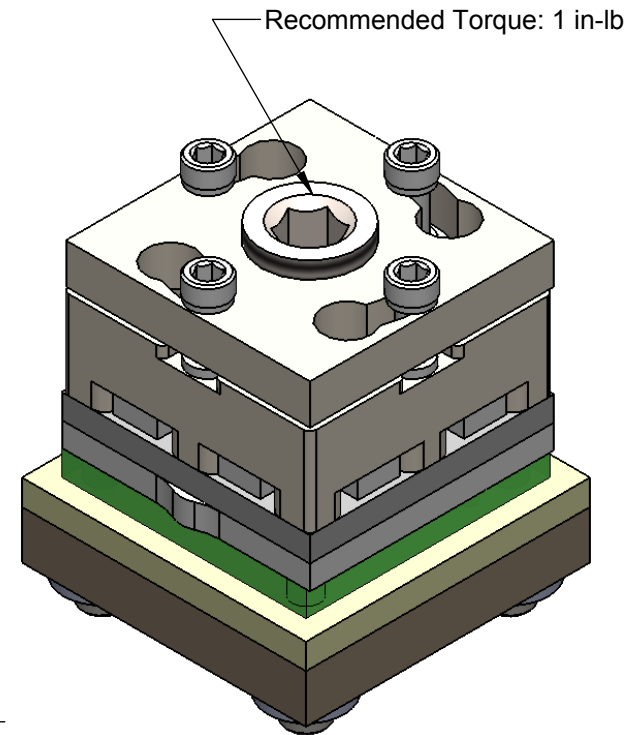
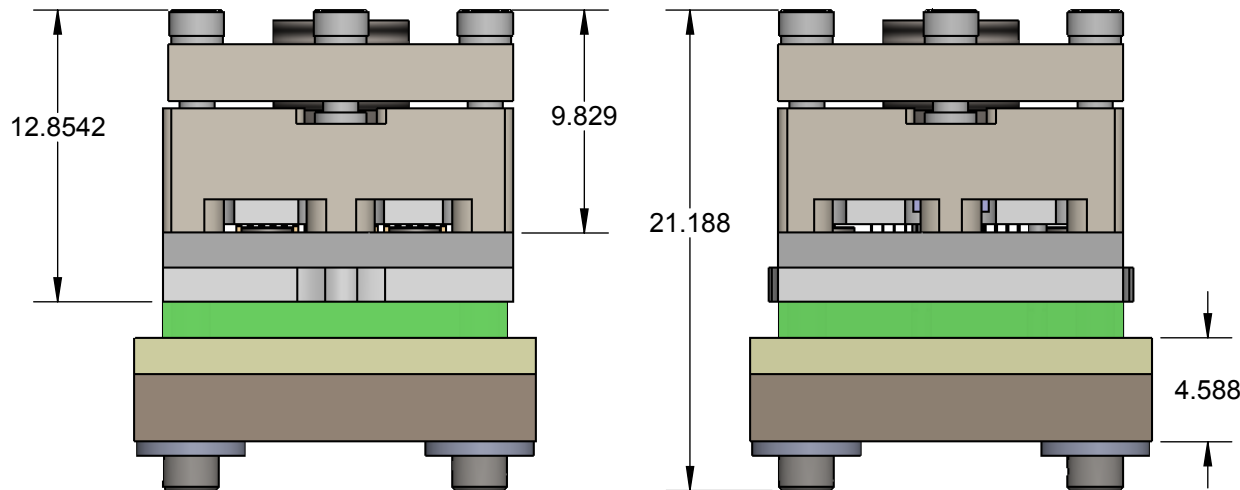


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



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



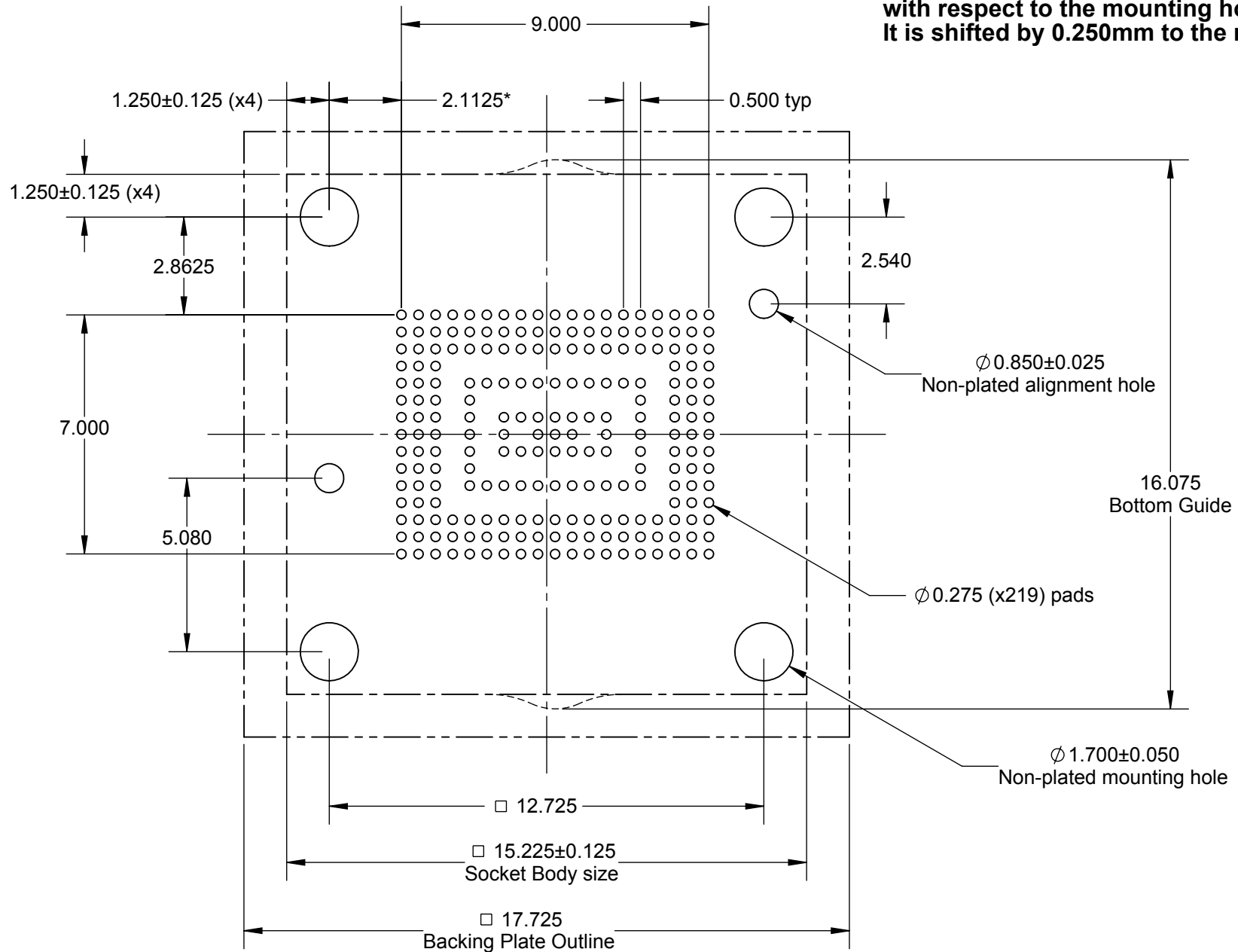
Description: SBT-BGA 8mmx10mm 0.5mm pitch 19x15 array BGA219

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.

SBT-BGA-7017 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 9.43	STATUS: Released ENG: S. Faiz FILE: SBT-BGA-7017 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 01/15/2014	REV. B SCALE: 3:1


***Note: BGA pattern is not symmetrical with respect to the mounting holes. It is shifted by 0.250mm to the right of center.**



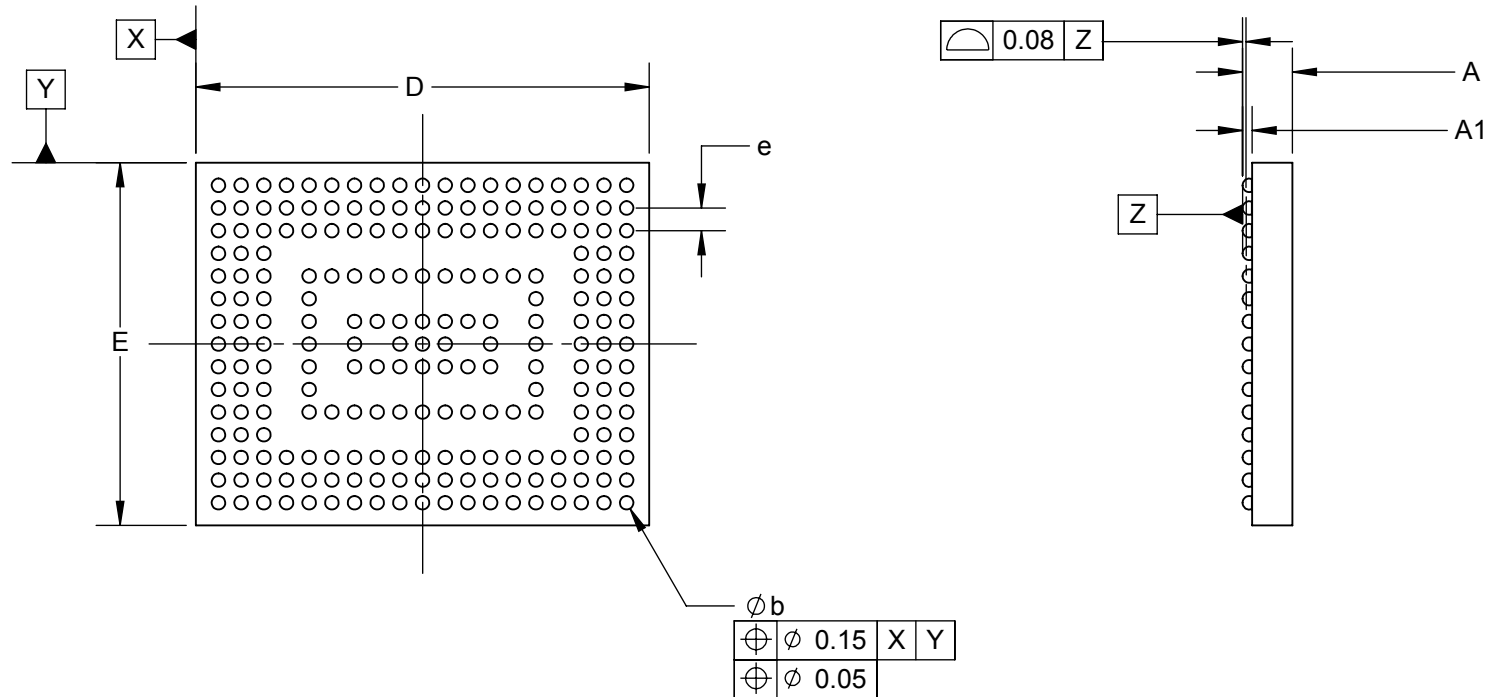
Description: Recommended PCB Layout

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.

 SBT-BGA-7017 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 9.43	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: SBT-BGA-7017 Dwg	DATE: 01/15/2014	

Ironwood Package Code: BGA219A




DIM	Minimum	Maximum
A	---	1.10
A1	0.16	0.26
b	---	0.30
D	10.00 BSC	
E	8.00 BSC	
e	0.50 BSC	
ARRAY	15 x 19	
PIN COUNT	219	

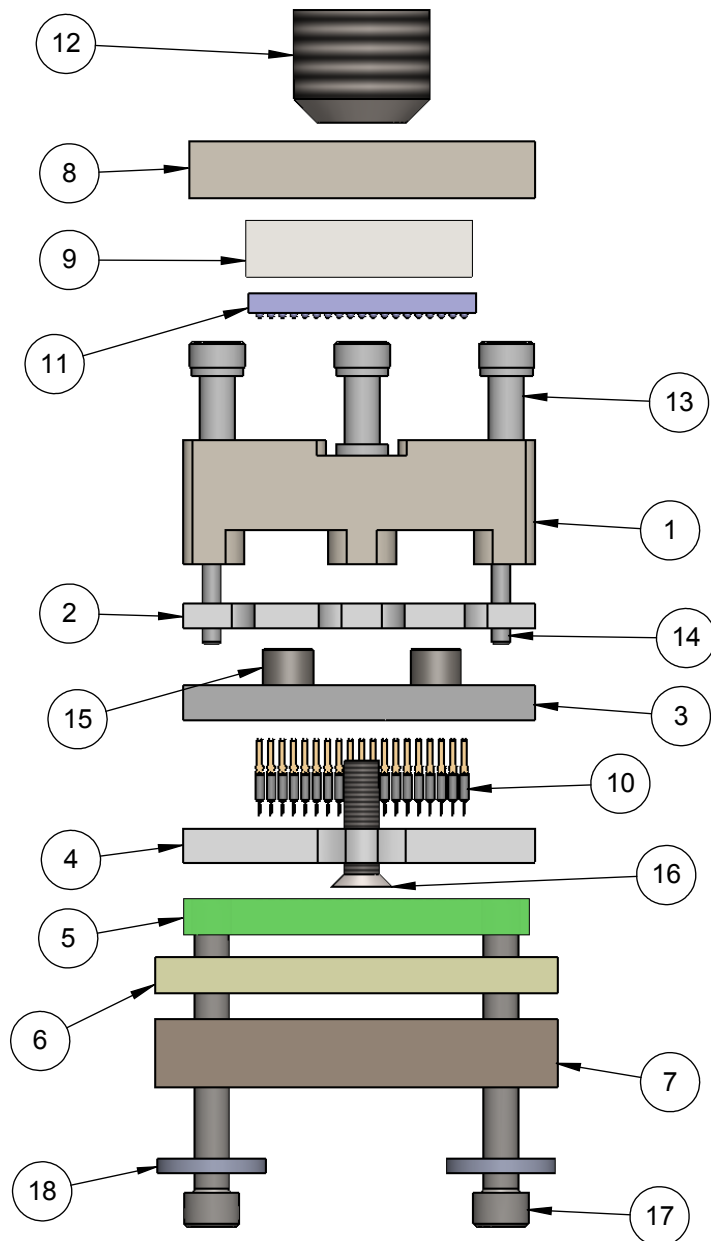
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

Description: Compatible BGA

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

Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], 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.

 SBT-BGA-7017 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 9.43	STATUS: Released	SHEET: 3 OF 5	REV. B
		ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: SBT-BGA-7017 Dwg	DATE: 01/15/2014	




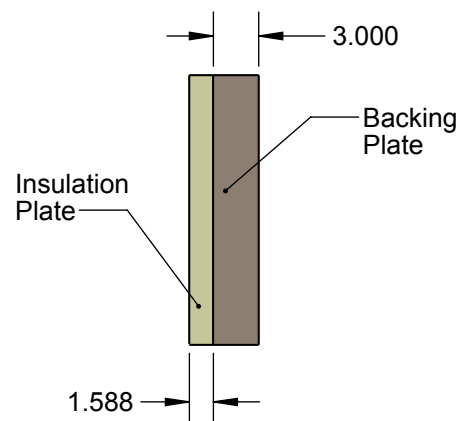
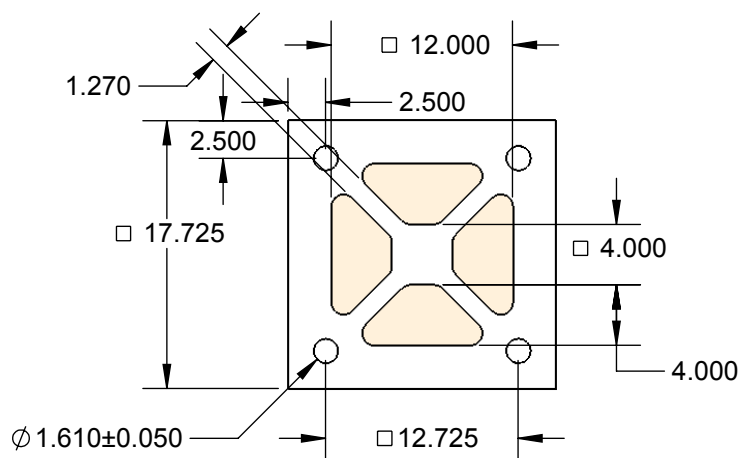
Description: Socket Assy, Insulation Plate

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

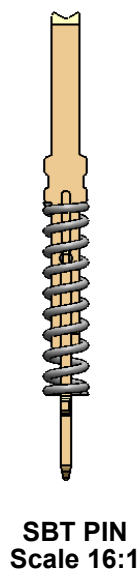
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change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

ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT BGA 10x10	7075-T6 Alumium Alloy
2	Floating Guide SBT-BGA 8mmX10mm, 0.5 pitch, 19 X15 array 219 position	Semitron MDS 100
3	Middle guide for SBT-BGA 8mmX10mm, 0.5 pitch, 19 X15 array 219 position	Semitron MDS 100
4	Bottom Guide SBT-BGA 8mmX10mm, 0.5 pitch, 19 X15 array 219 position	Semitron MDS 100
5	Test board, daisy chain, for 8x10mm body, 0.5mm, 19x15 array BGA219	FR4
6	Insulation Plate	FR4 High temp
7	Backing Plate, 17.73 X 17.73 x 3mm	7075-T6 Aluminum Alloy
8	Socket Lid	7075-T6 Aluminum Alloy
9	Compression Plate	7075-T6 Aluminum Alloy
10	SBT Pin, SBT-BGA 0.5mm-0.8mm	
11	BGA test chip, 8x10mm body, 0.5mm, 19x15 array BGA219	
12	Compression Screw M6x1	Stainless Steel (18-8)
13	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
14	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel
15	Floating Guide Spring	Alloy Steel (SS)
16	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
17	#0-80 x 0.5, SH Cap Screw	18-8 Stainless Steel
18	Washer, #0 x .025", Nylon	Nylon 6/6

SBT-BGA-7017 Drawing		Material: Material <not specified> Finish: Weight: 9.43	STATUS: Released	SHEET: 4 OF 5	REV. B
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com			ENG: S. Faiz	DRAWN BY: M. Raske	SCALE: 3:1
			FILE: SBT-BGA-7017 Dwg	DATE: 01/15/2014	



Backing and Insulation Plate
Scale 2:1



Rev	Date	Initials	Description
B	2/6/15	RP/MR	P-P196A was P-P149A, R3200 was R1391

Description: History

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.

SBT-BGA-7017 Drawing		STATUS: Released		SHEET: 5 OF 5	REV. B
 ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified>		ENG: S. Faiz		DRAWN BY: M. Raske
	Finish:		FILE: SBT-BGA-7017 Dwg		DATE: 01/15/2014
	Weight: 9.43				SCALE: 3:1