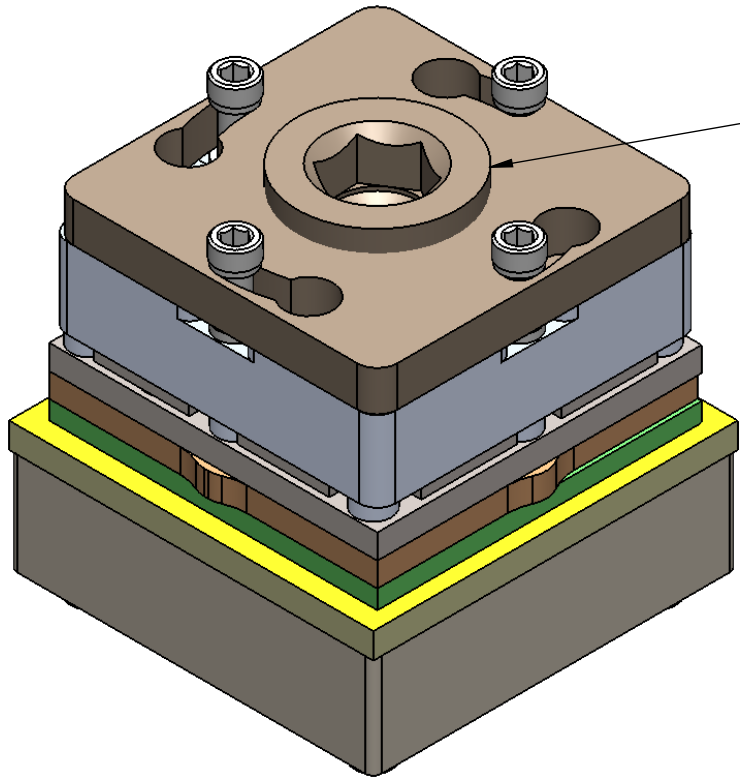


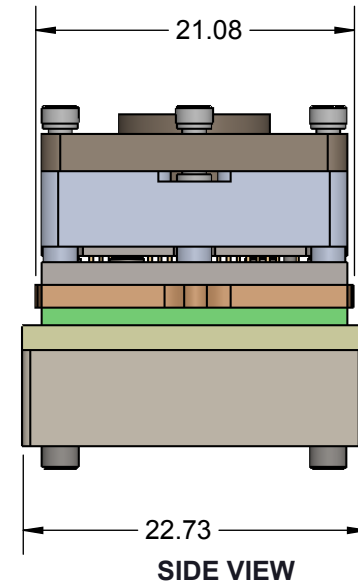
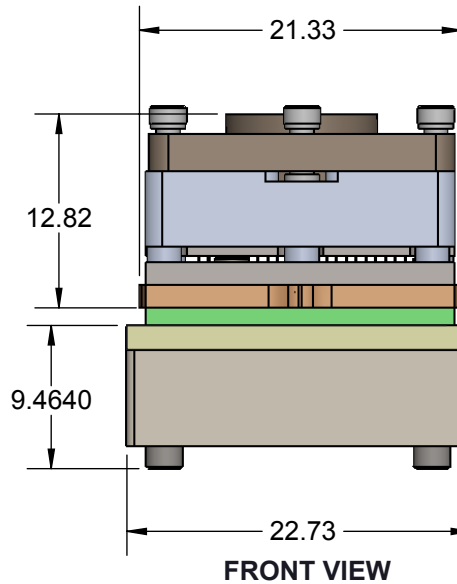
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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




Recommended torque = 8 in-lbs

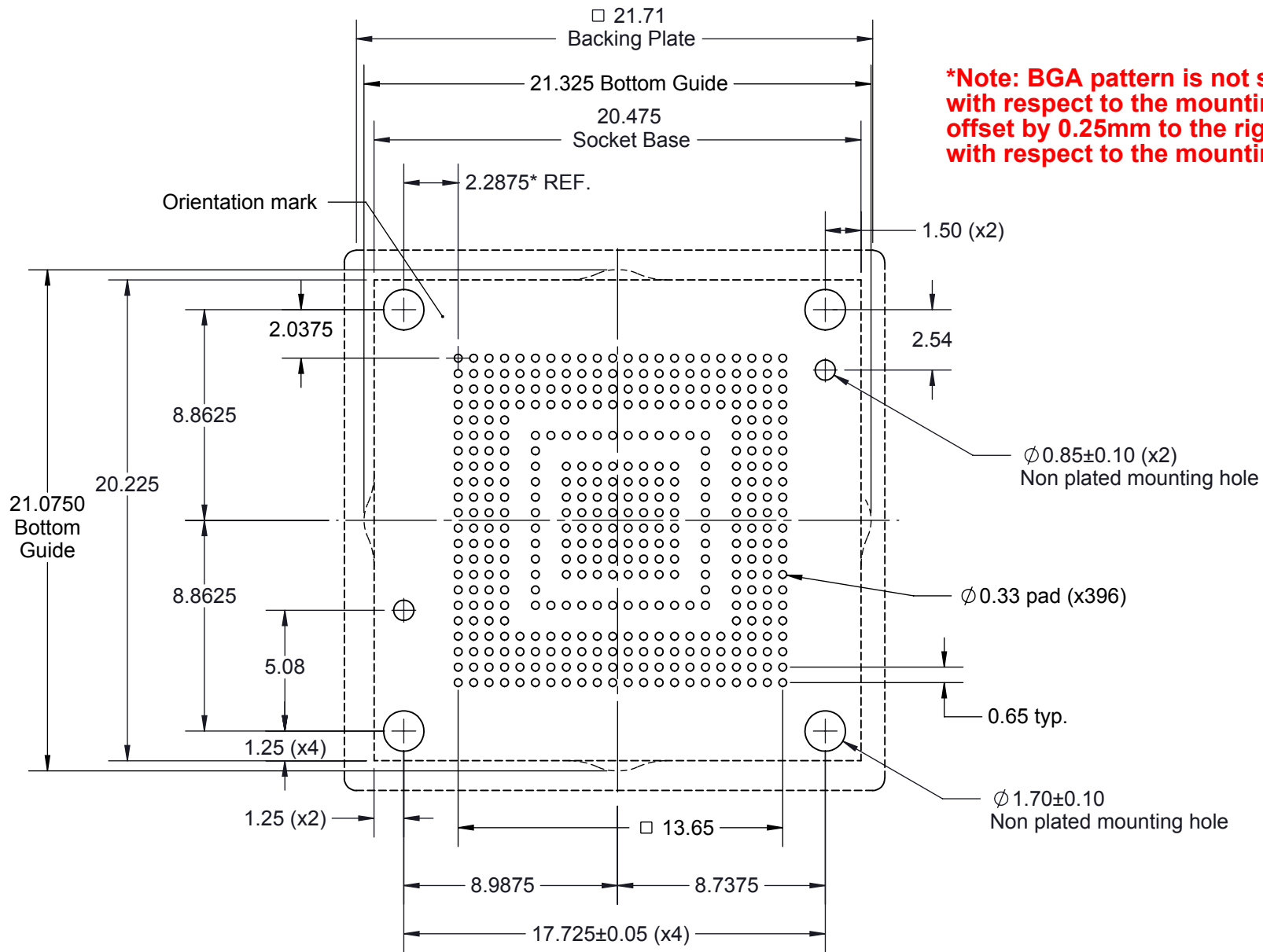


Description: SBT-BGA 15x15mm 0.65mm pitch 22x22 array BGA396

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-7009 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: n/a Finish: n/a Weight: 21.11	STATUS: Released	SHEET: 1 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: SBT-BGA-7009 Dwg	DATE: 2/25/2013	



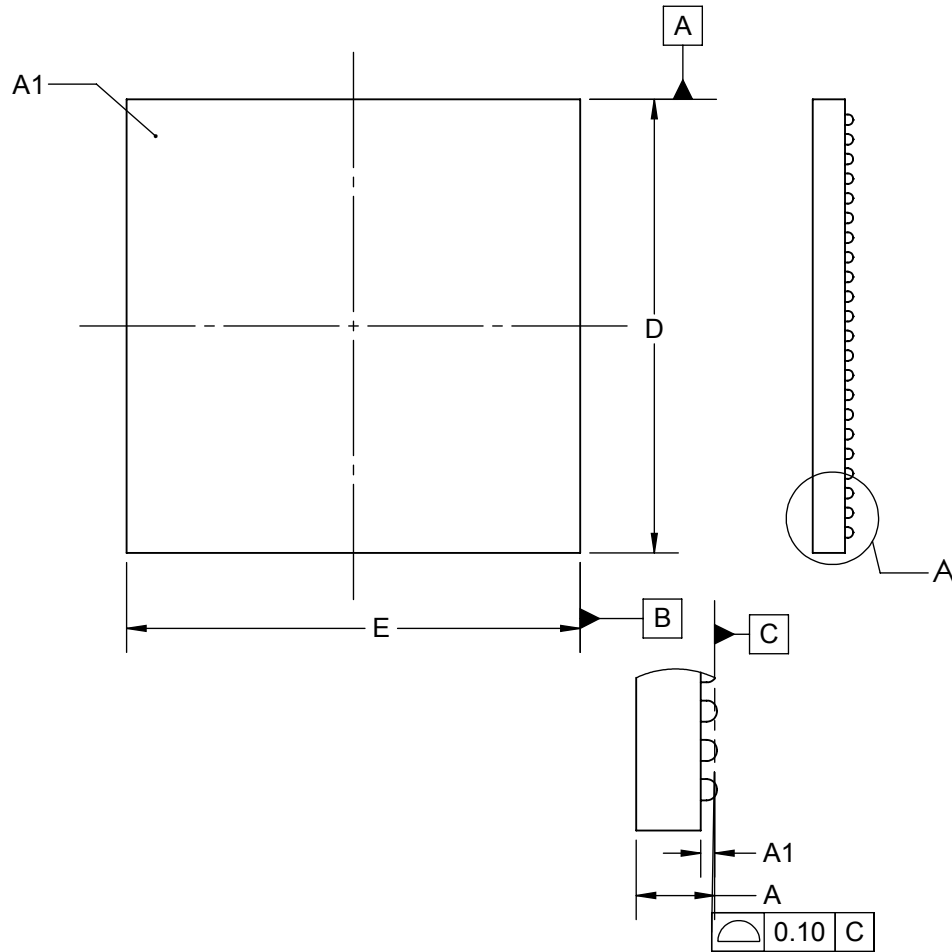
Target PCB Recommendations
 Total thickness: 1.6mm min.
 Plating: Gold or Solder finish
 PCB Pad height: Same or higher than solder mask

Description: Layout

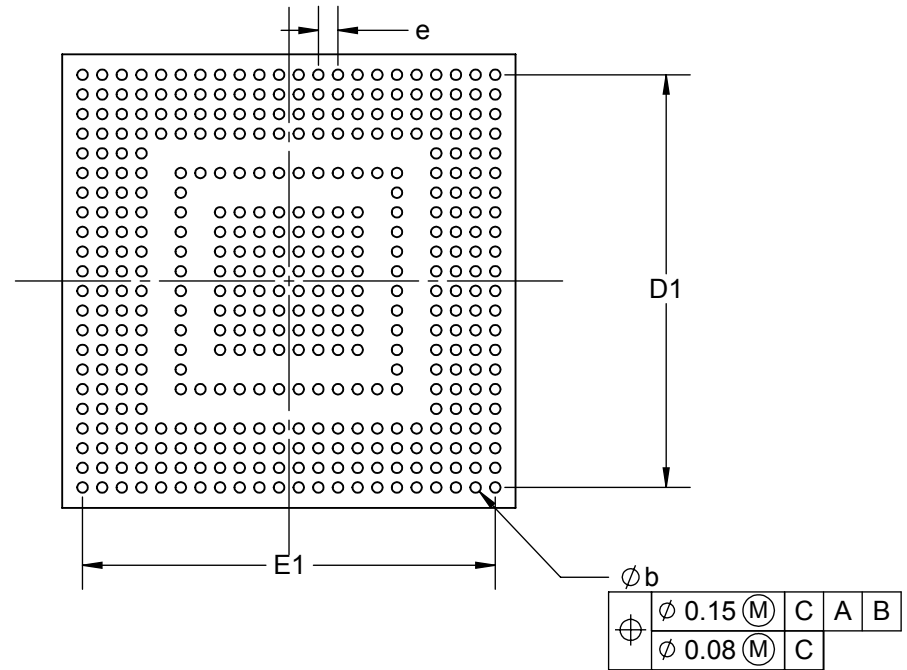
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters ±0.0254mm [±0.001"], Pitches (from true position) ±0.0762mm [±0.003"], substrate thickness tolerance ±10%, all other tolerances ±0.127mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 <p>SBT-BGA-7009 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: n/a Finish: n/a Weight: 21.11</p>	STATUS: Released	SHEET: 2 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 4:1
		FILE: SBT-BGA-7009 Dwg	DATE: 2/25/2013	

Ironwood Package Code: BGA396D



**DETAIL A
SCALE 8 : 1**




DIM	Minimum	Maximum
A		1.40
A1	0.22	0.32
b	0.32	0.42
D	14.90	15.10
E	14.90	15.10
D1	13.65 BSC	
E1	13.65 BSC	
e	0.65 BSC	
Array	22 x 22	

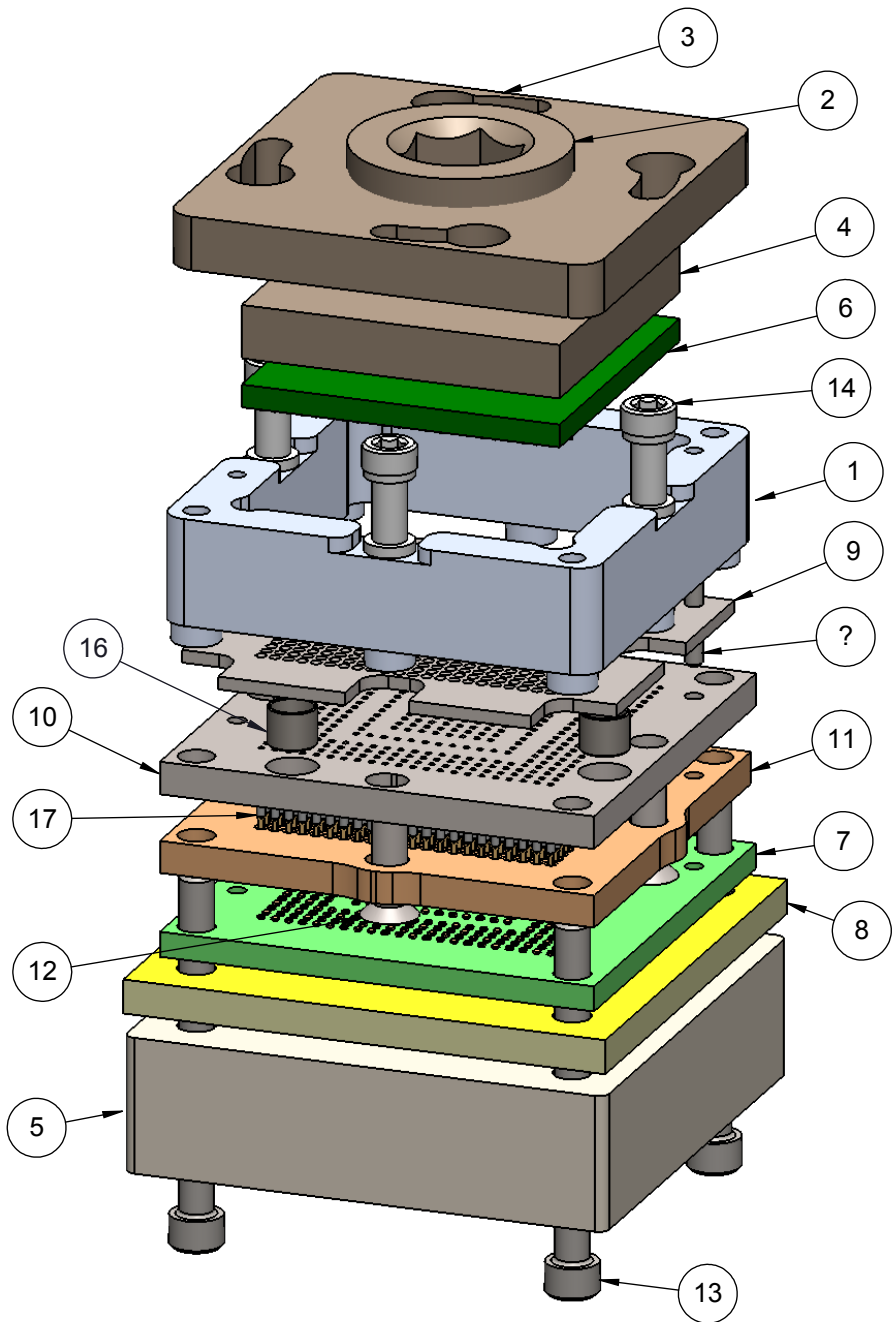
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: BGA spec

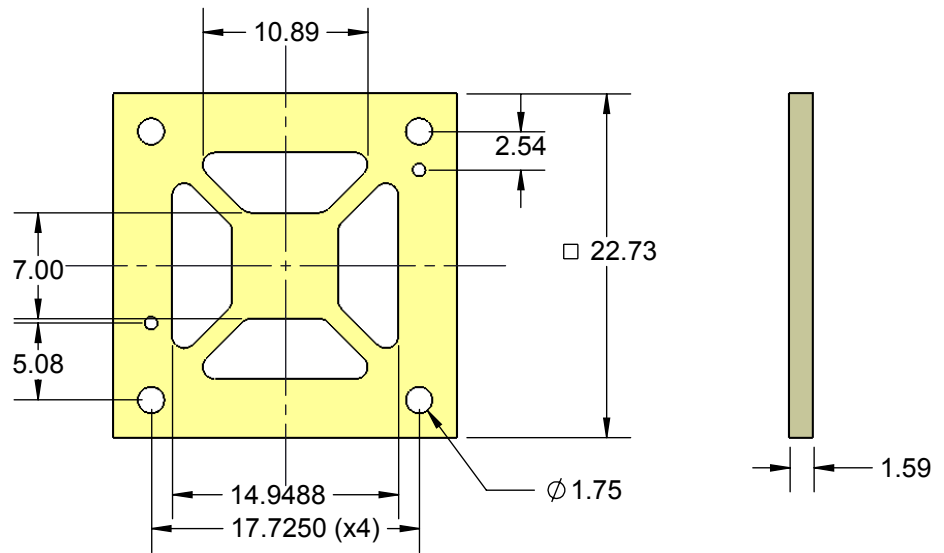
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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-7009 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: n/a Finish: n/a Weight: 21.11	STATUS: Released ENG: S. Huang FILE: SBT-BGA-7009 Dwg	SHEET: 3 OF 5 DRAWN BY: S. Huang DATE: 2/25/2013	REV. B SCALE: 4:1	



ITEM NO.	DESCRIPTION	Material
1	Socket Base SBT BGA 15mm IC	7075-T6 Aluminum Alloy
2	Compression Screw M10	7075-T6 Alumium Alloy
3	Socket Lid, 15mm	7075-T6 Alumium Alloy
4	Compression Plate, 15mm x 15mm	7075-T6 Aluminum Alloy
5	SBT/CBT Ni Plated 15mm Backing Plate	7075-T6 Alumium Alloy
6	BGA396 0.65mm pitch 22x22 array 15x15mm	FR4
7	Target PCB BGA396 0.65mm pitch 22x22 array	FR4
8	Insulation Plate	FR4
9	Floating Guide	PEEK Ceramic filled
10	Middle Pogo Guide	PEEK Ceramic filled
11	Bottom Pogo pin Guide	PEEK Ceramic filled
12	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
13	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
14	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
15	Dowel pin, 1/32" X .25", SS	Chrome Stainless Steel
16	Floating Guide Spring	Alloy Steel (SS)
17	SBT Pin, SBT-BGA 0.5mm-0.8mm	




**Insulation Plate
Scale 2:1**

Description: Socket Material List

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

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


 SBT-BGA-7009 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: n/a Finish: n/a Weight: 21.11	STATUS: Released ENG: S. Huang FILE: SBT-BGA-7009 Dwg	SHEET: 4 OF 5 DRAWN BY: S. Huang DATE: 2/25/2013	REV. B SCALE: 3:1
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Rev	Date	Initials	Description
A	12/17/12	SH	Original
B	2/17/15	RP/MR	Bottom Guide changes per MP238. Middle Guide changes per MP237 R3200 was R1391, adjusted dowel pin

Description: Revisions

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-7009 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 5 OF 5	REV. B
		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:1
		FILE: SBT-BGA-7009 Dwg	DATE: 2/25/2013	