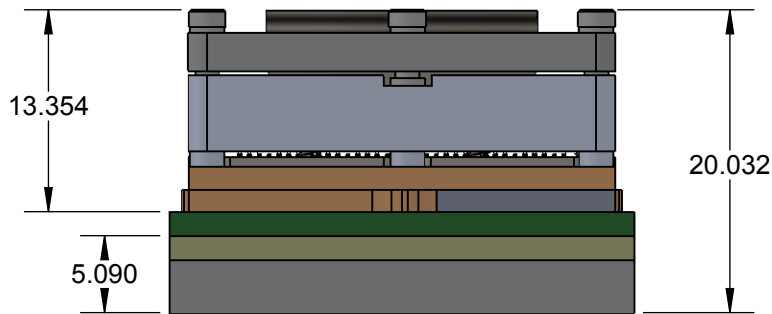
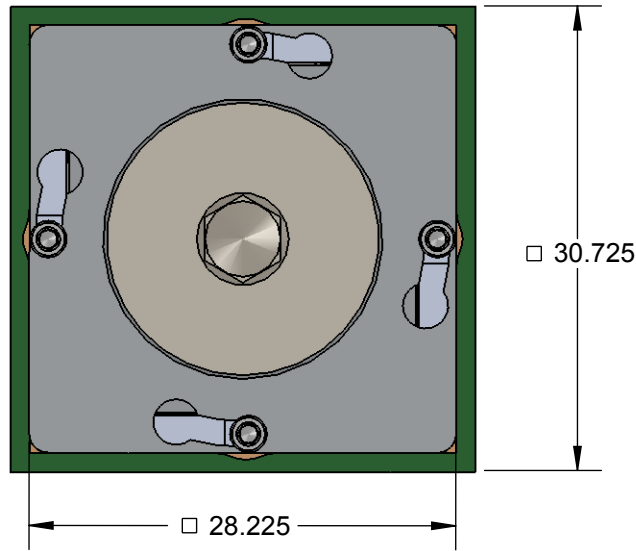


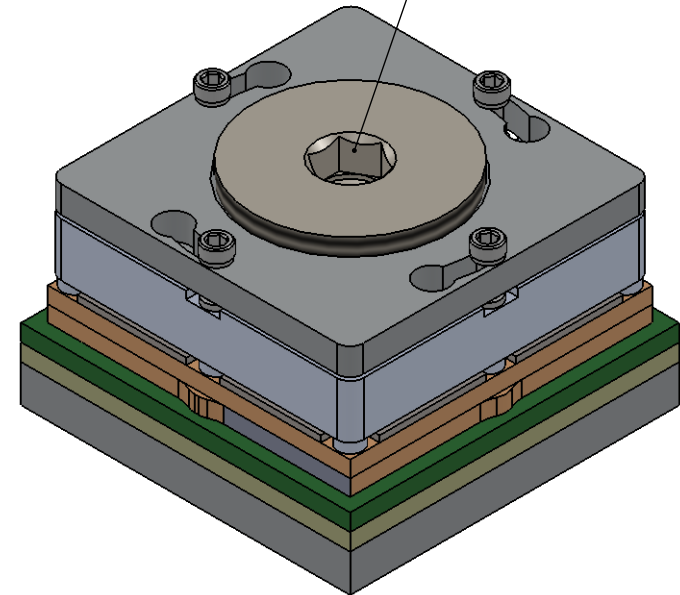
# SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

## 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: 14 in.lbs.

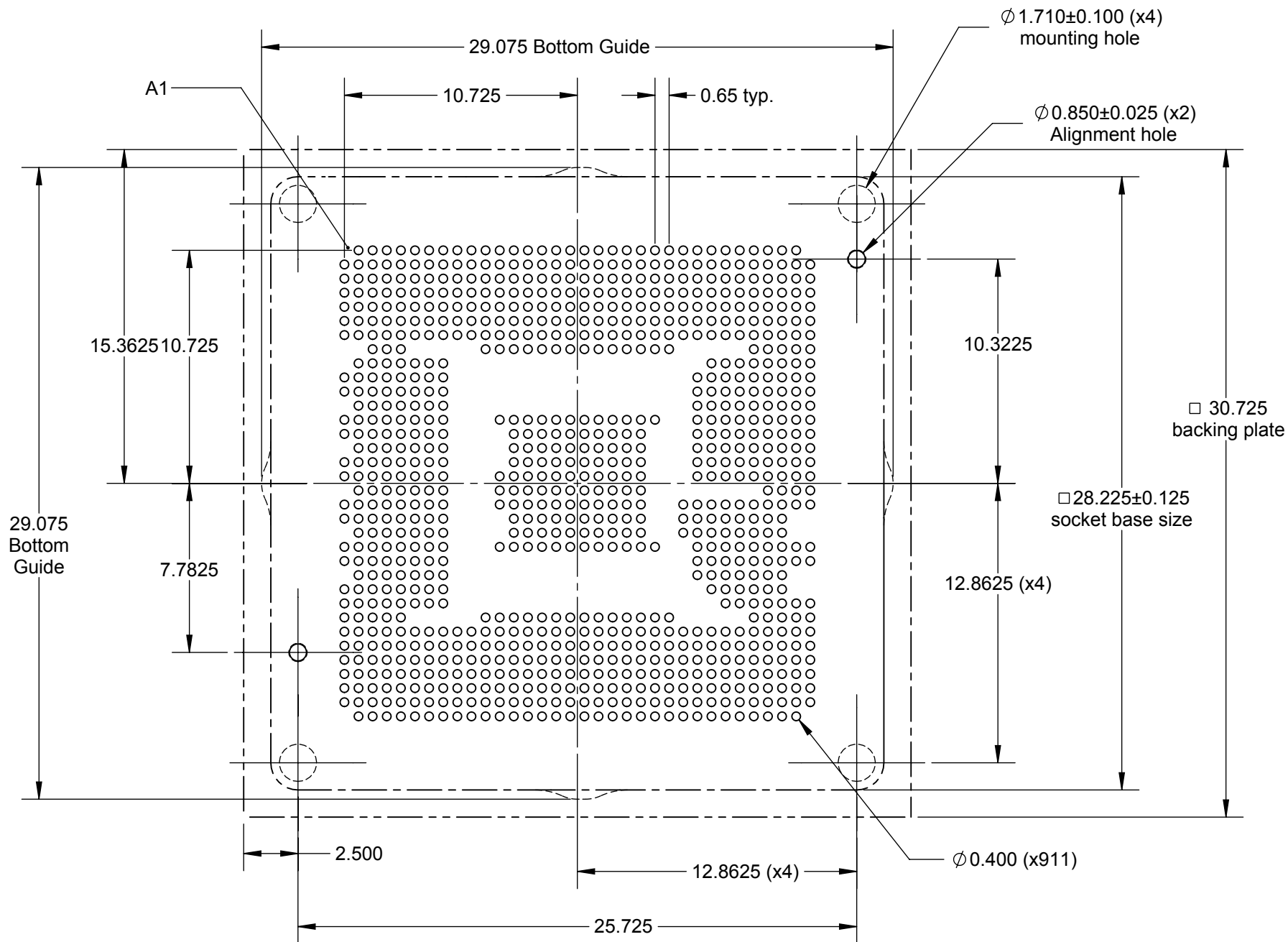


## Description: SBT-BGA911, 23mm 34x34 array, 0.65mm pitch

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.


 <b>SBT-BGA-7023 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.53	STATUS: Released ENG: M.A. Fedde FILE: SBT-BGA-7023 Dwg	SHEET: 1 OF 4 DRAWN BY: M. Raske DATE: 08/19/2014	REV. A SCALE: 2:1



### Description: Recommended PCB Layout

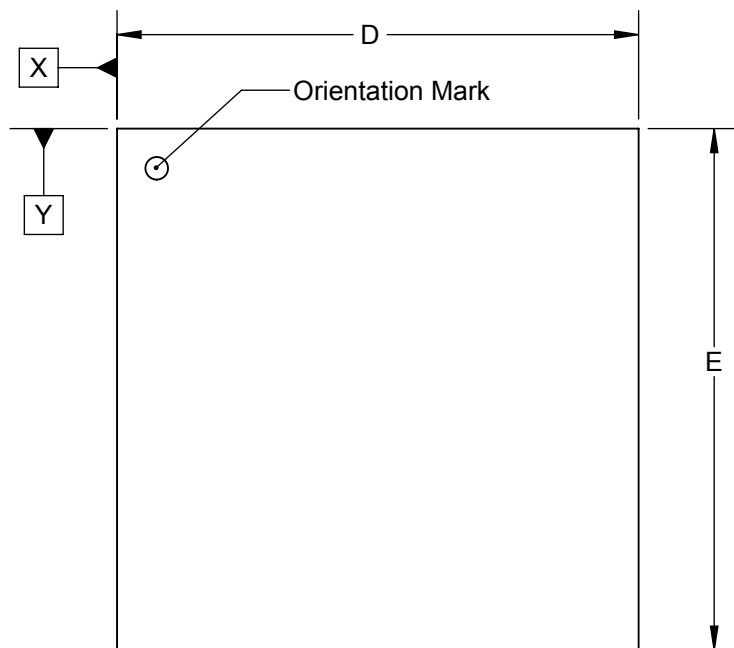
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

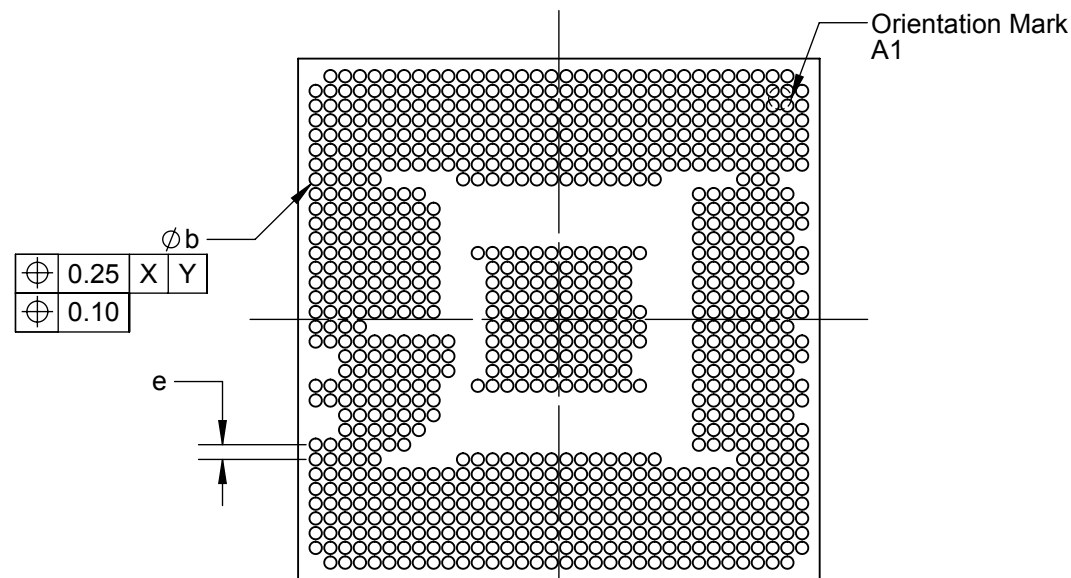
 <b>SBT-BGA-7023 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.53	STATUS: Released ENG: M.A. Fedde FILE: SBT-BGA-7023 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 08/19/2014	REV. A SCALE: 4:1

**NOTE: IC Mold cap also included to accommodate 2nd package with top mold cap**

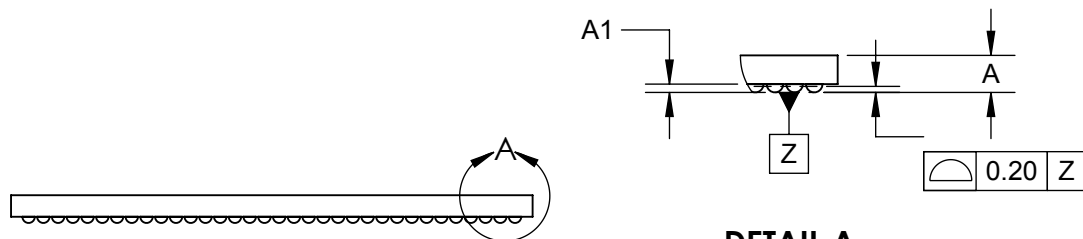
**Ironwood Package Code: BGA911A**



**TOP VIEW**



**BOTTOM VIEW**



**FRONT VIEW**

**DETAIL A  
SCALE 4 : 1**


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.

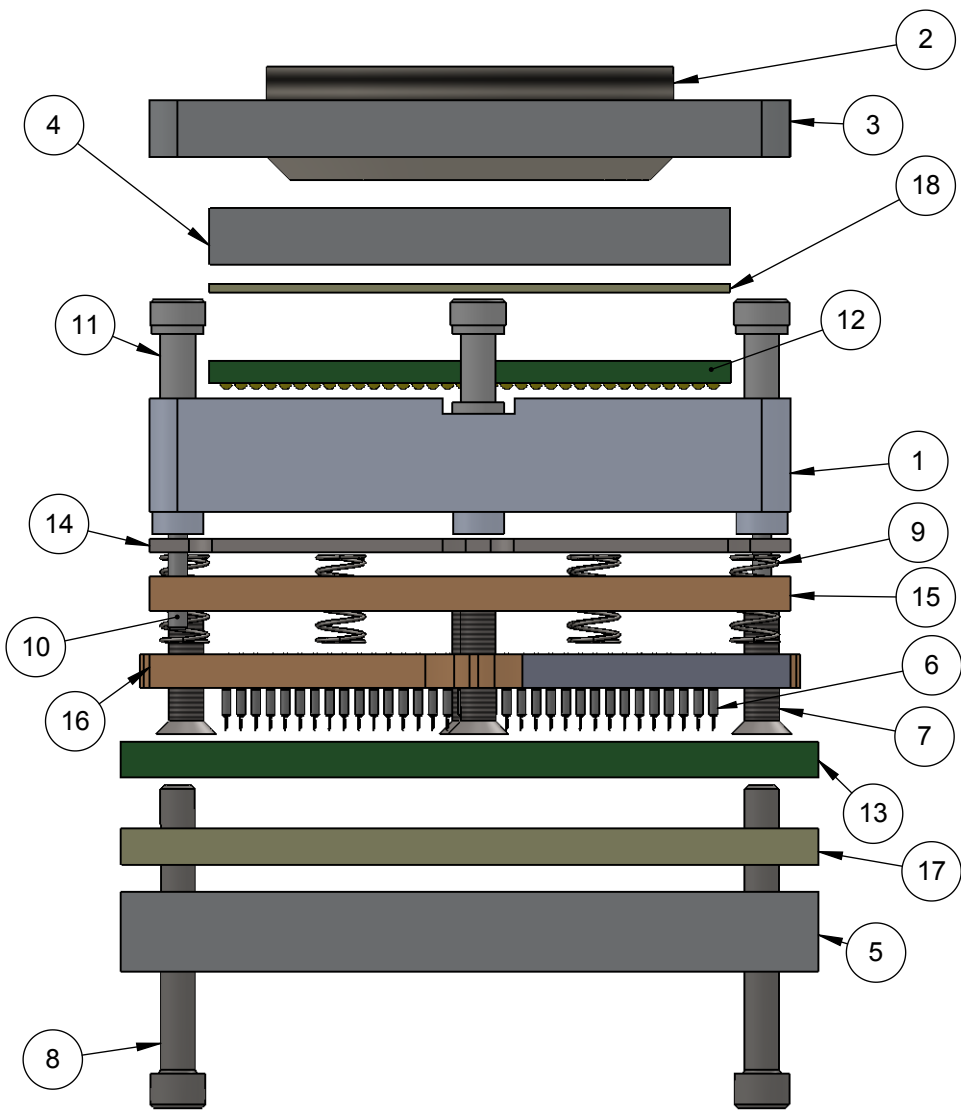
DIM	Minimum	Maximum
A		1.96
A1	0.27	0.37
b		0.55
D	23.00 BSC	
E	23.00 BSC	
e	0.65 BSC	
ARRAY	34 X 34	
PIN COUNT	911	

**Description: Compatible BGA**

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

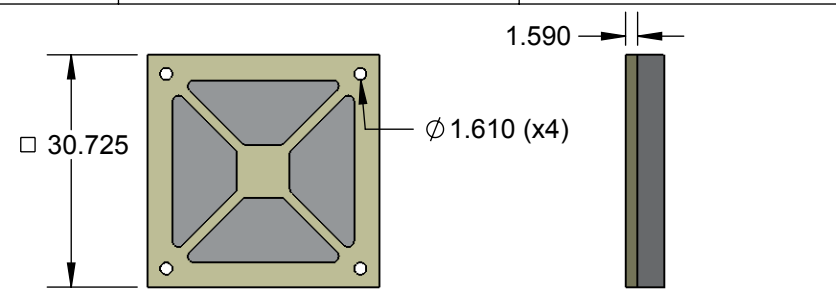
**Tolerances:** Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are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

 <p><b>SBT-BGA-7023 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 31.53</p>	<p>STATUS: Released ENG: M.A. Fedde FILE: SBT-BGA-7023 Dwg</p>	<p>SHEET: 3 OF 4 DRAWN BY: M. Raske DATE: 08/19/2014</p>	<p>REV. A SCALE: 3:1</p>



Pin Detail  
Scale 16:1


ITEM NO.	Description	Material
1	Socket Base SBT BGA 23x23mm	7075-T6 Aluminum Alloy
2	Compression Screw, M18	7075-T6 Aluminum Alloy
3	SBT Ni plt skt lid 23mm	7075-T6, Plate (SS)
4	SBT COMP PLT NI PLT 23MM CSTM	7075-T6, Plate (SS)
5	SBT/CBT NI PLT BACKING PLT 23MM	7075-T6, Plate (SS)
6	SBT Pin, SBT-BGA 0.5mm-0.8mm	
7	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
8	#0-80 x 0.5, SH Cap Screw	Alloy Steel
9	Floating Guide Spring	Alloy Steel (SS)
10	Dowel pin, 1/32" x 5/16", SS	Chrome Stainless Steel
11	#0-80 Shoulder Screw, 0.062" thread length	Stainless Steel (303)
12	Test Chip BGA911	Material <not specified>
13	Test PCB BGA911	Material <not specified>
14	Floating Guide 23mm, 0.65 pitch, 34x34 array	PEEK Ceramic filled
15	Middle Pogo Guide 23mm 0.65mm 34X34 array	Semitron MDS 100
16	Bottom Guide 23mm 0.65 pitch, 34x34 array	Semitron MDS 100
17	Insulation Plate 23mm IC	FR4 Standard
18	IC Frame	FR4 Standard



Insulation and Backing Plate  
Scale 1:1

### 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.

<b>SBT-BGA-7023 Drawing</b>  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 31.53	STATUS: Released ENG: M.A. Fedde FILE: SBT-BGA-7023 Dwg	SHEET: 4 OF 4 DRAWN BY: M. Raske DATE: 08/19/2014	REV. A SCALE: 3:1
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