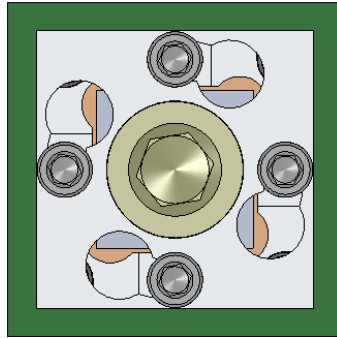


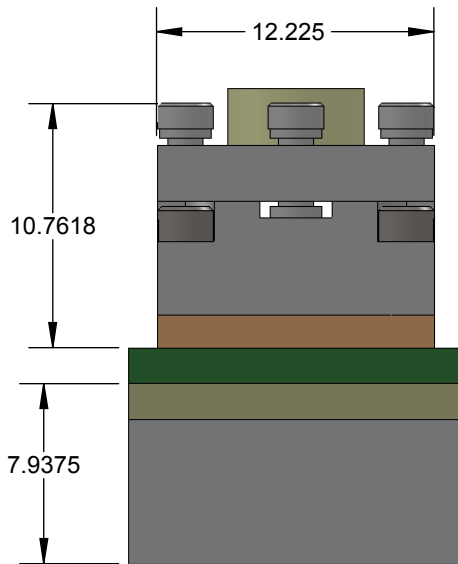
SM-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR TEST APPLICATIONS

Features

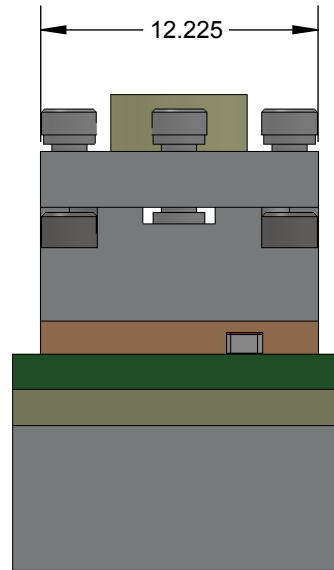
- Wide temperature range (-55C to +150C).
- High current capability (up to 4A).
- Excellent signal integrity at high frequencies.
- Low and stable contact resistance for reliable production yield.
- Highly compliant to accommodate wide co-planarity variations.



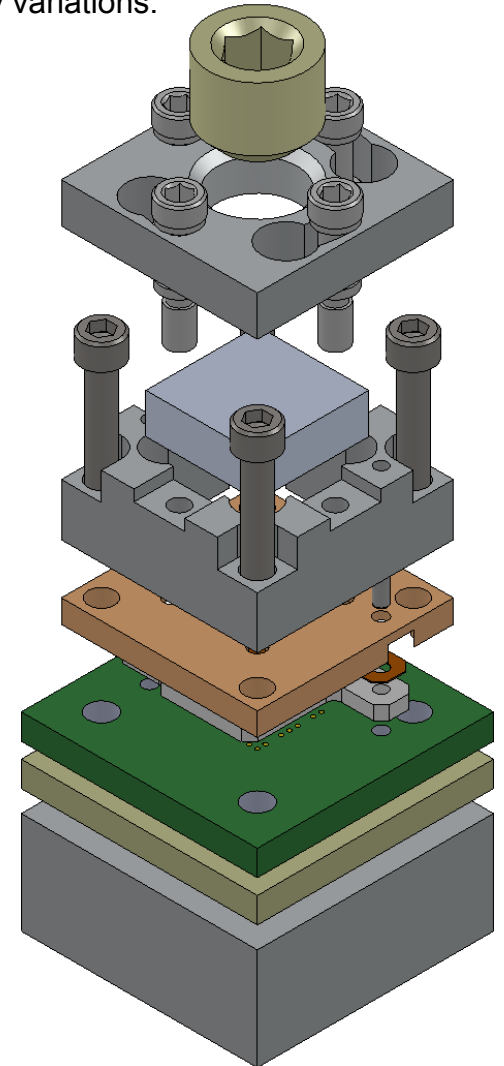
TOP VIEW



FRONT VIEW




SIDE VIEW



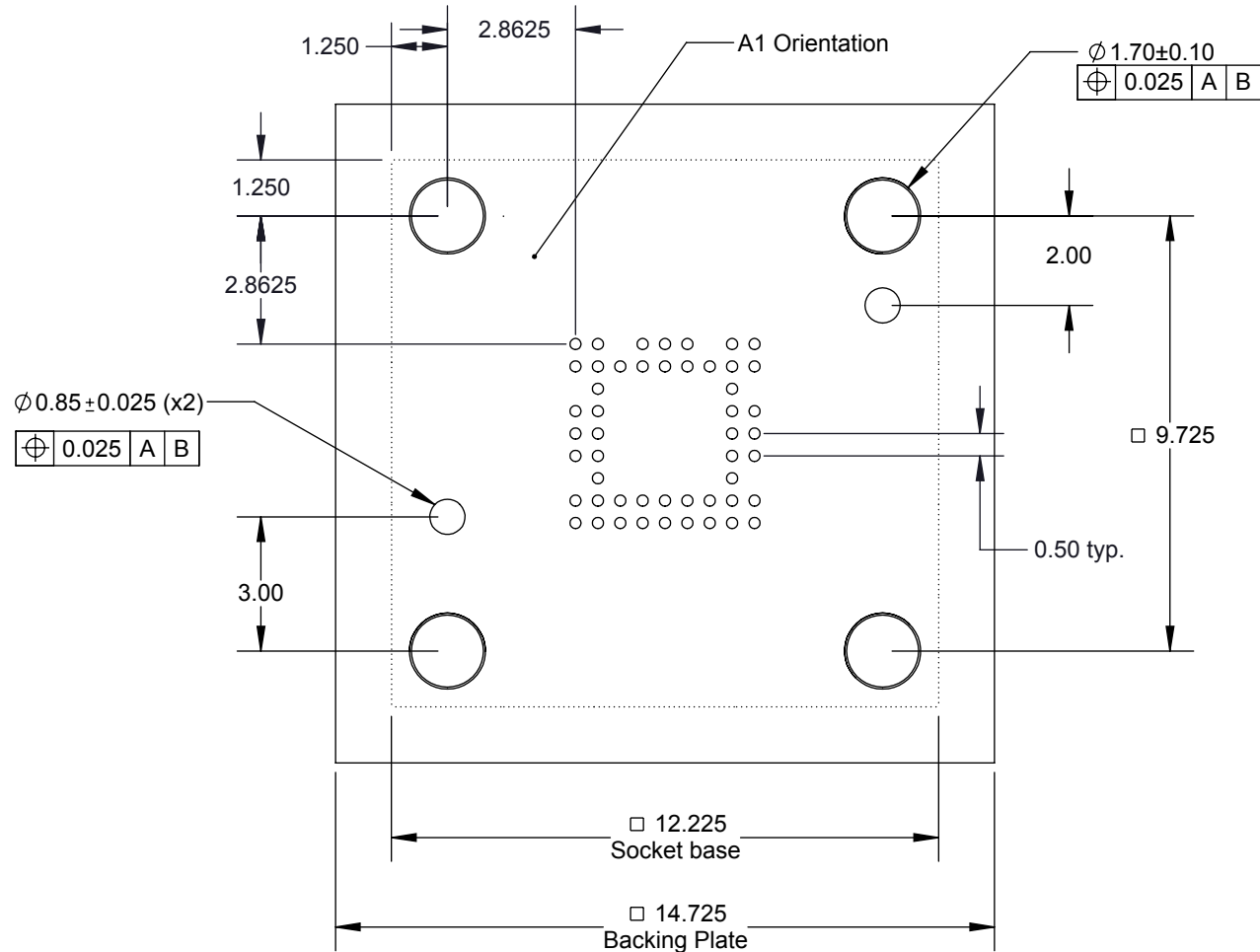
Description: Socket Specification

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

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

 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 8.69	STATUS: Released	SHEET: 1 OF 4	REV. A
		DRAWN BY: D. Hauer	SCALE: 3:1	
		FILE: SM-BGA-9023 Dwg	DATE: 01/18/2013	

***Note: BGA pattern is symmetrical with respect to the mounting holes.**




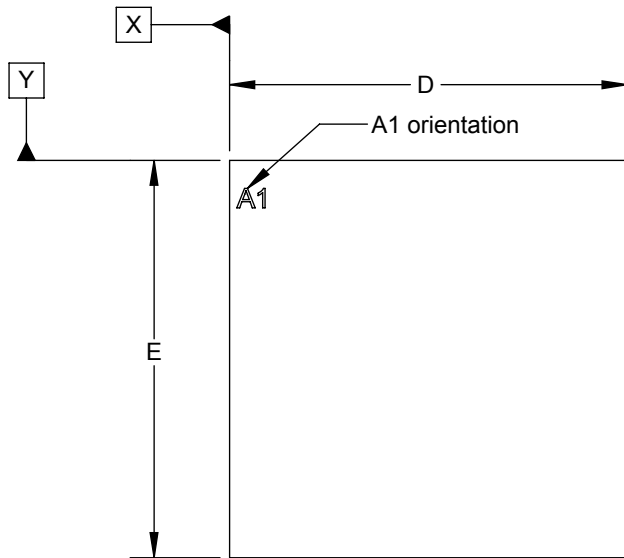
Target PCB Recommendations
 Total thickness: 1.5mm min.
 Plating: Gold or Solder finish

Description: Recommended PCB Layout

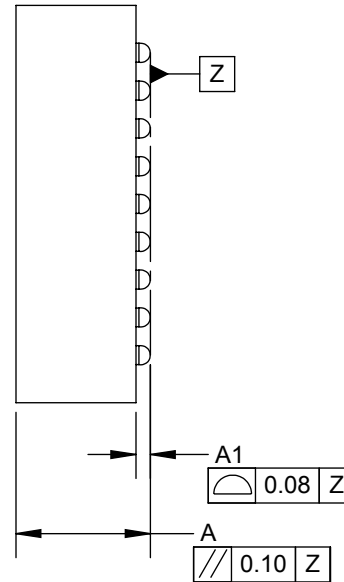
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters $\pm 0.03\text{mm}$ [± 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.

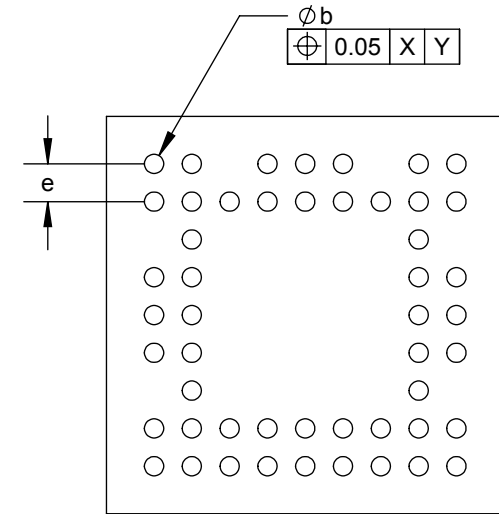
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 8.69	STATUS: Released DRAWN BY: D. Hauer FILE: SM-BGA-9023 Dwg	SHEET: 2 OF 4 SCALE: 6:1 DATE: 01/18/2013	REV. A



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Dimensions are in millimeters.


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

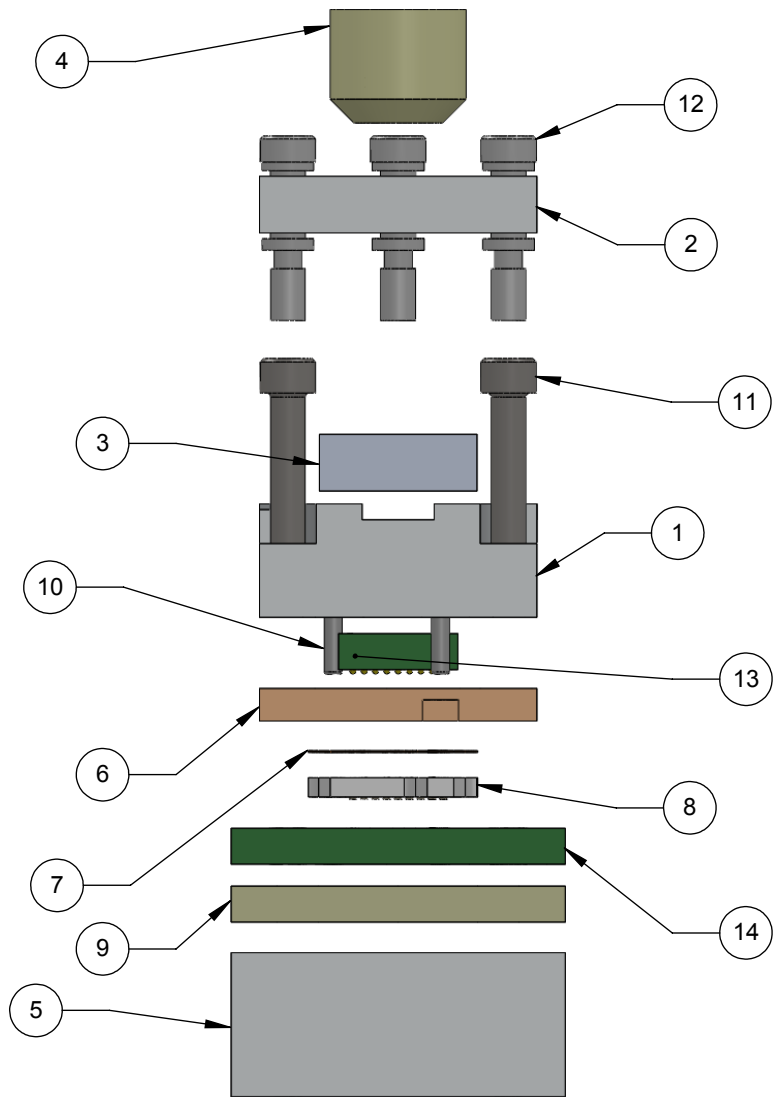
DIM	MIN	MAX
A		1.0
A1	0.15	0.25
b	0.25	0.35
D	5.0 BSC	
E	5.0 BSC	
e	0.5 BSC	

Description: BGA

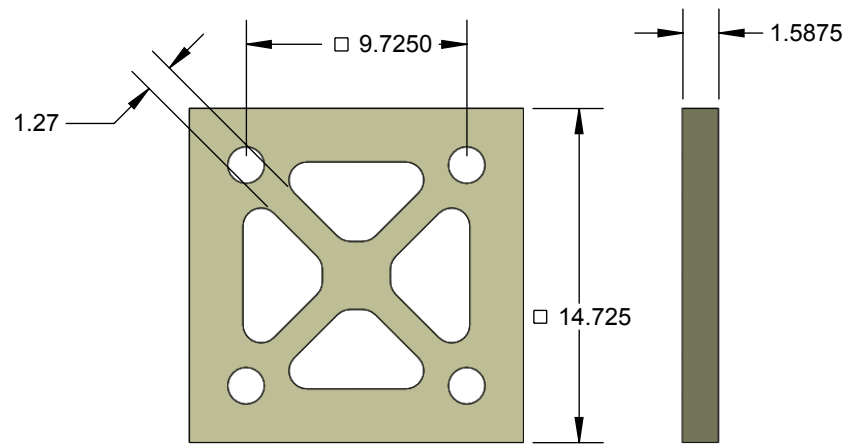
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 <p>SM-BGA-9023 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 8.69</p>	STATUS: Released	SHEET: 3 OF 4	REV. A
		DRAWN BY: D. Hauer	SCALE: 10:1	
		FILE: SM-BGA-9023 Dwg	DATE: 01/18/2013	



ITEM NO.	DESCRIPTION	Material	Default/QTY.
1	Socket Base	7075-T6 Aluminum Alloy	1
2	Socket Lid 7mm	7075-T6 Aluminum Alloy	1
3	Compression Plate 7x7mm	7075-T6 Aluminum Alloy	1
4	Compression Screw M6x1	Stainless Steel (18-8)	1
5	Backing Plate	7075-T6 Aluminum Alloy	1
6	5mm SM IC Guide	Ultem 1000	1
7	Ball Guide	Kapton Polyimide/Cirlex	1
8	SM-BGA50, 9X9 ARRAY	Silmat	1
9	Insulation Plate 7mm	FR4 Standard	1
10	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel	2
11	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel	4
12	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)	4
13	Test Chip	Material <not specified>	1
14	Test PCB	Material <not specified>	1




Insulation Plate

Description: Skt, 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.

 SM-BGA-9023 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 8.69	STATUS: Released	SHEET: 4 OF 4	REV. A
		DRAWN BY: D. Hauer	SCALE: 3:1	
		FILE: SM-BGA-9023 Dwg	DATE: 01/18/2013	