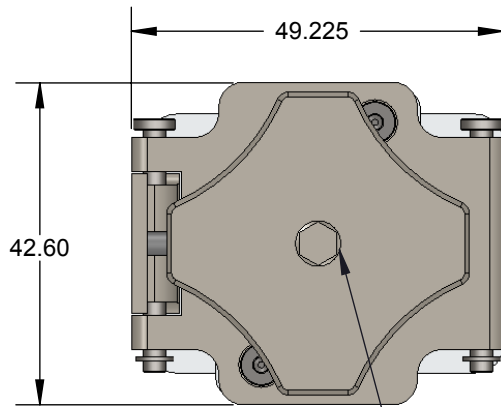


CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

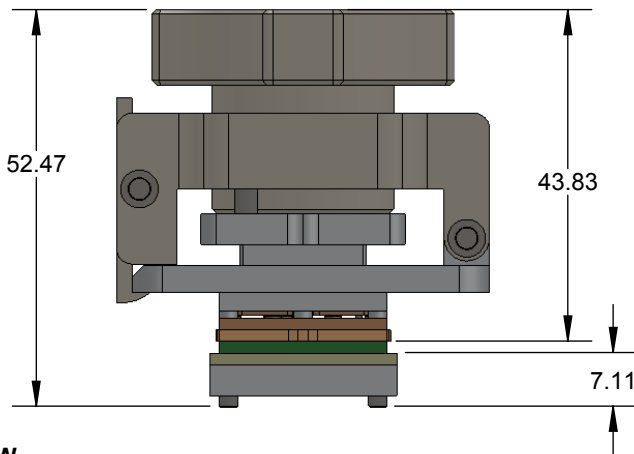
FEATURES:

- 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

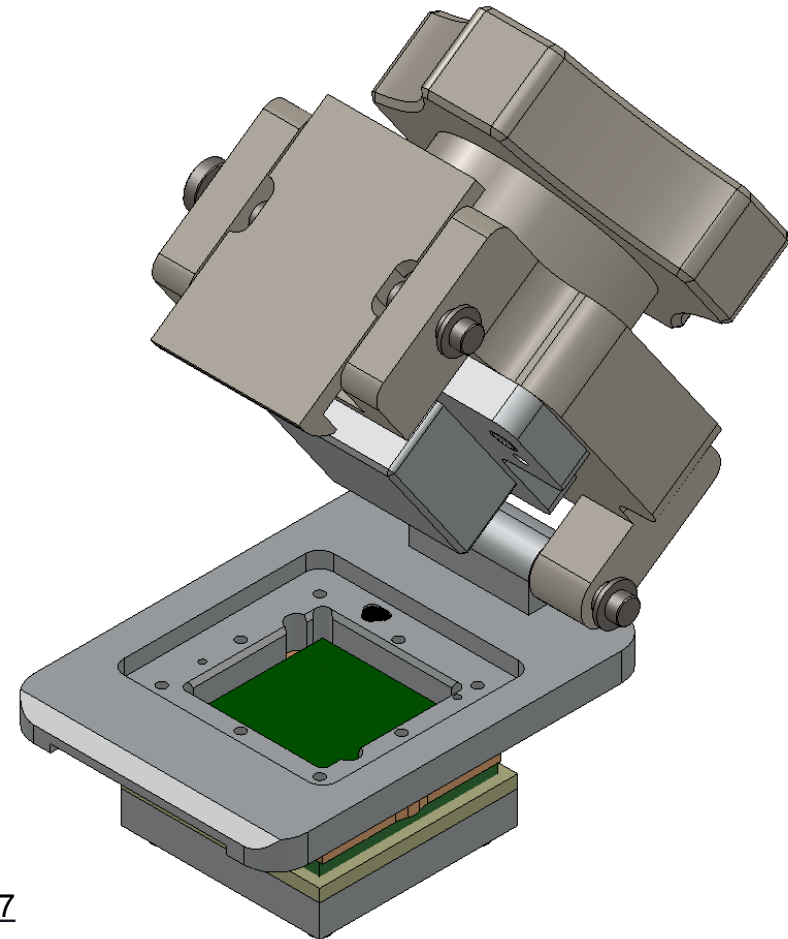


TOP VIEW

RECOMMENDED TORQUE: 5.12 IN-LBS




SIDE VIEW



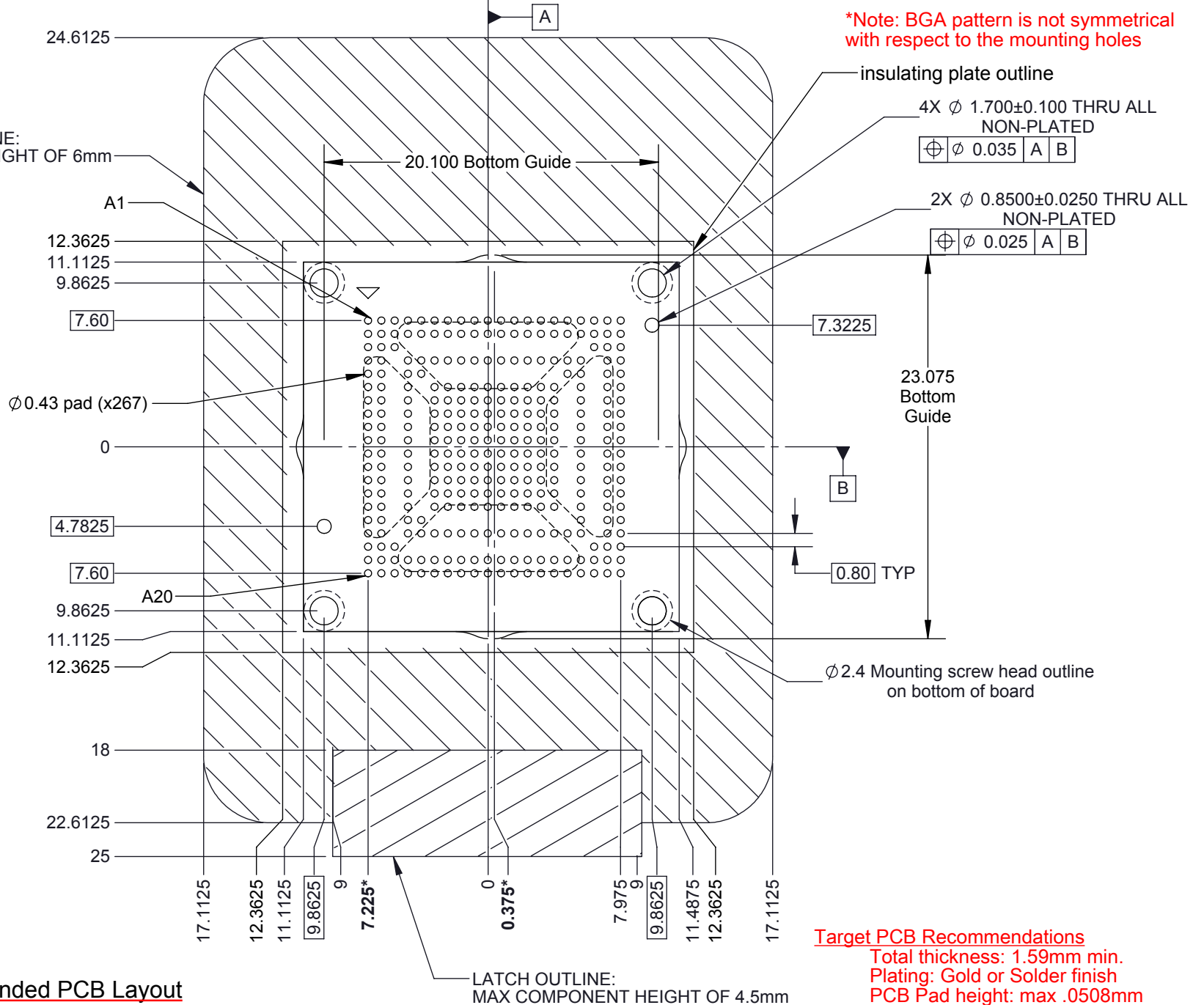
Description: Clam shell socket for 17mm, 20x20 array 0.8mm pitch BGA267

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.

 CBT-BGA-6046 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 130.49	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6046 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 4/23/15	REV. A SCALE: 1:1

SOCKET BASE OUTLINE:
MAX COMPONENT HEIGHT OF 6mm



*Note: BGA pattern is not symmetrical with respect to the mounting holes

insulating plate outline

4X $\phi 1.700 \pm 0.100$ THRU ALL NON-PLATED

$\phi 0.035$ A B

2X $\phi 0.8500 \pm 0.0250$ THRU ALL NON-PLATED

$\phi 0.025$ A B

23.075 Bottom Guide

B

0.80 TYP

$\phi 2.4$ Mounting screw head outline on bottom of board

Target PCB Recommendations

Total thickness: 1.59mm min.

Plating: Gold or Solder finish


PCB Pad height: max .0508mm

below than solder mask

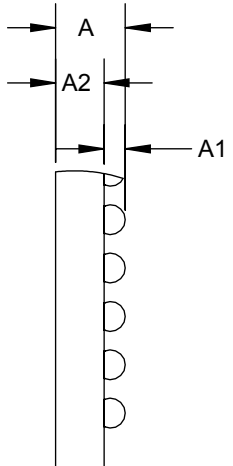
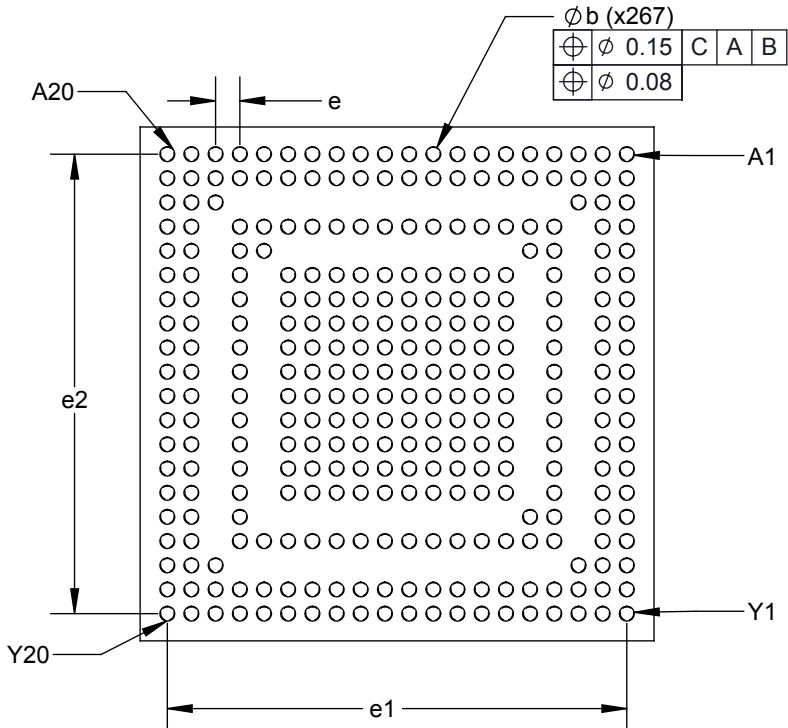
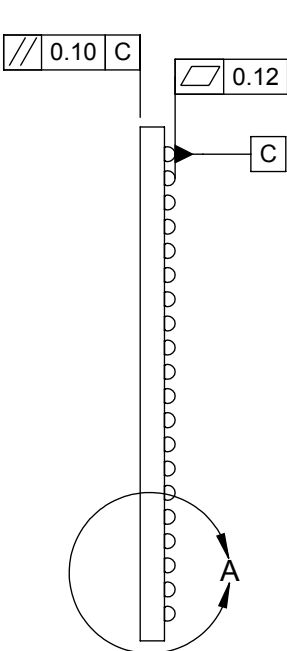
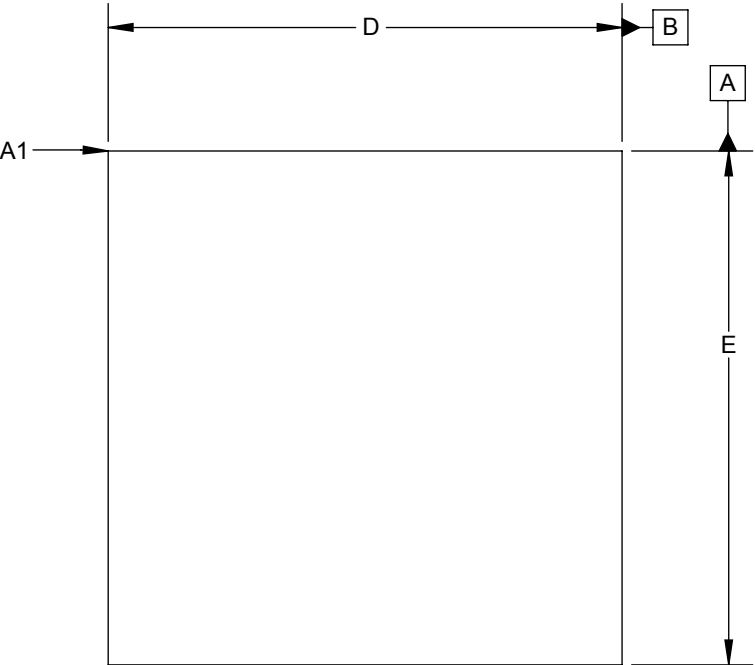
Description: Recommended PCB Layout

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.

 <p>CBT-BGA-6046 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 130.49</p>	<p>STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6046 Dwg</p>	<p>SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 4/23/15</p>	<p>REV. A SCALE: 3:1</p>

Ironwood Package Code BGA267A



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 C.
4. Datum C (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.

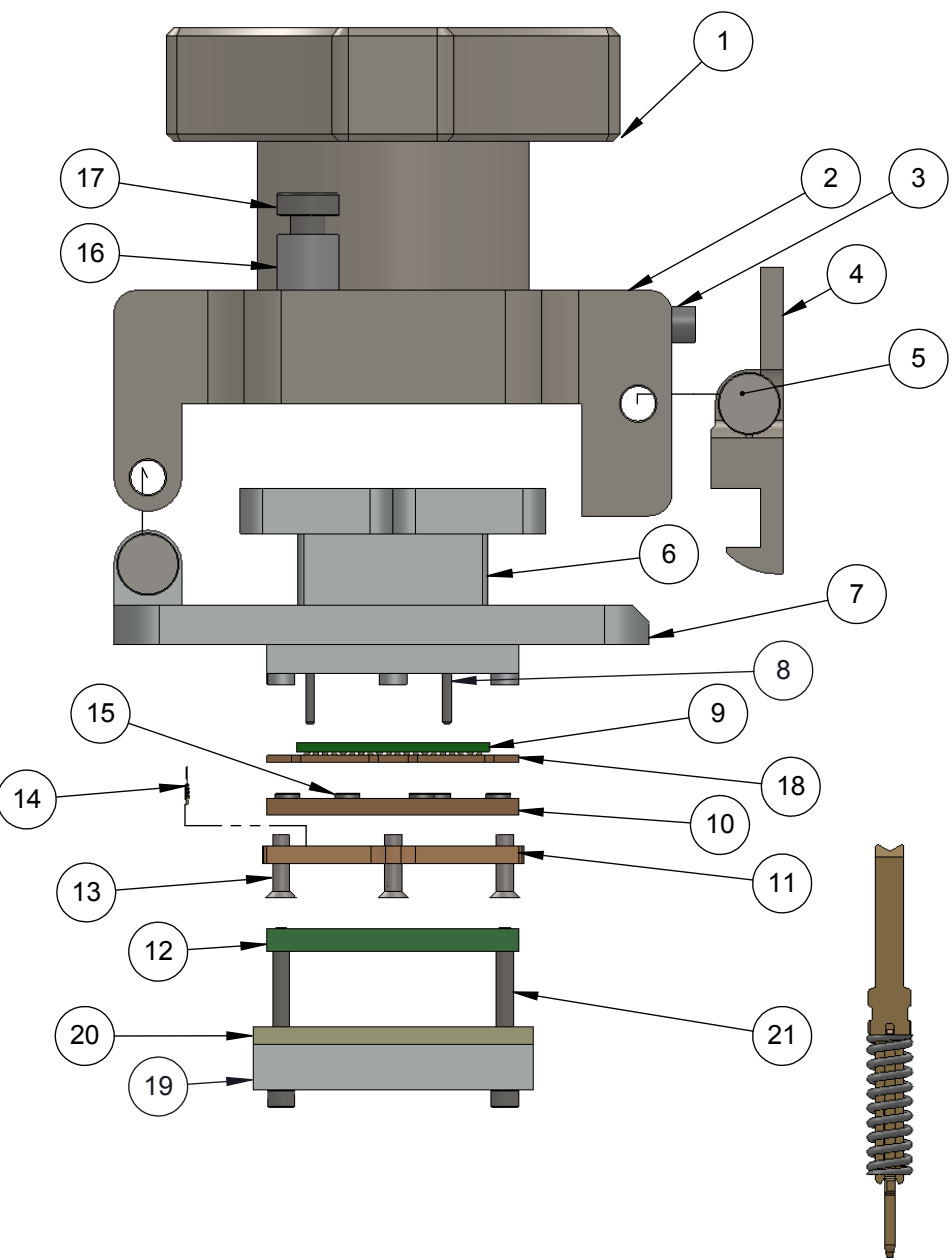
DIM	Minimum	Nominal	Maximum
A	1.25	1.35	1.50
A1	0.30	0.35	0.40
A2	0.95	1.00	1.10
b	0.40	0.45	0.50
D	17.0 +/- 0.1mm		
E	17.0 +/- 0.1mm		
e	0.80		
e1	15.2		
e2	15.2		
ARRAY	20 x 20		
PIN COUNT			267

**DETAIL A
SCALE 8 : 1**

Description: Compatible BGA

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 CBT-BGA-6046 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 130.49	STATUS: Released ENG: E. Smolentseva FILE: CBT-BGA-6046 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 4/23/15	REV. A SCALE: 4:1




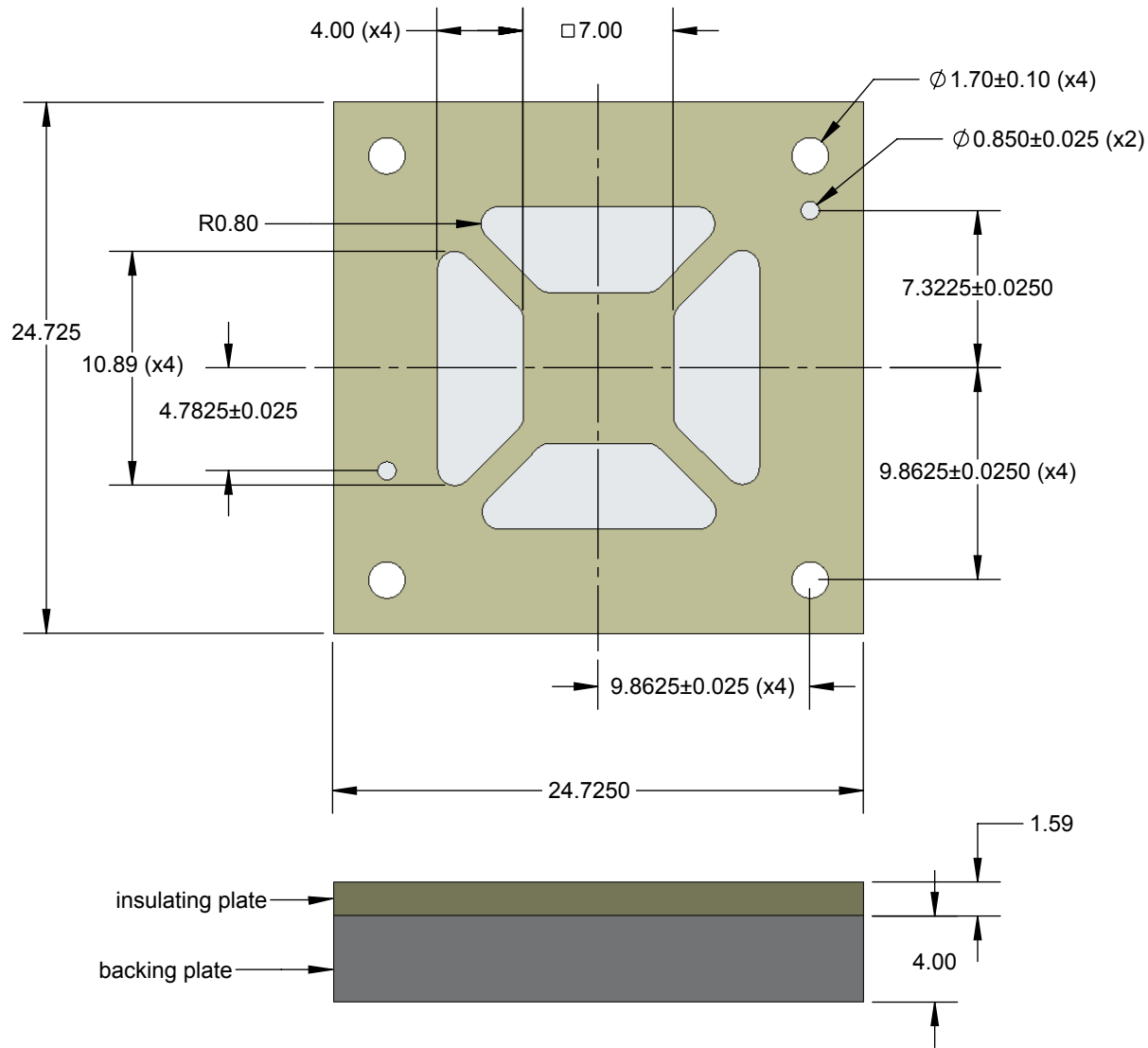
ITEM NO.	Description	Material
1	Compression Screw	7075-T6 Aluminum Alloy
2	Socket Lid	7075-T6 Aluminum Alloy
3	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
4	Latch	7075-T6 Aluminum Alloy
5	Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide	AISI 1045 Steel, cold drawn
6	CBT Ni compression plate 17mm 0.375mm shift	7075-T6 Aluminum Alloy
7	Base for Clam shell socket 17mm 0.8mm pitch IC	7075-T6 Aluminum Alloy
8	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
9	Customer's device	FR4
10	Middle Guide 17mm 20x20 0.8mm pitch	Semitron MDS 100
11	Bottom Pogo Guide BGA267 17x17mm 0.8mm pitch 20x20 array	Semitron MDS 100
12	Target PCB	FR4 Standard
13	#0-80, 90 deg., head pin guide screw, Peek material 5.5715mm overall Length	PEEK unfilled
14	SBT Pin, SBT-BGA 0.5mm-0.8mm	
15	Floating Guide Spring	Alloy Steel (SS)
16	Spring Clamshell lid assembly	Steel Music Wire
17	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
18	Floating Guide 17mm 20x20 array 0.8mm pitch	Semitron MDS 100
19	Backing Plate	7075-T6 Aluminum Alloy
20	Insulation Plate	High Temp FR4
21	0-80 9/16" Socket Head Cap Screw	Stainless Steel (18-8)

Description: Socket Assembly

PIN DETAIL SCALE 16:1

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.


CBT-BGA-6046 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 130.49	STATUS: Released	SHEET: 4 OF 5	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 3:2
		FILE: CBT-BGA-6046 Dwg	DATE: 4/23/15	



Description: Backing and Insulating 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.

 CBT-BGA-6046 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 130.49	STATUS: Released	SHEET: 5 OF 5	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 3:1
		FILE: CBT-BGA-6046 Dwg	DATE: 4/23/15	