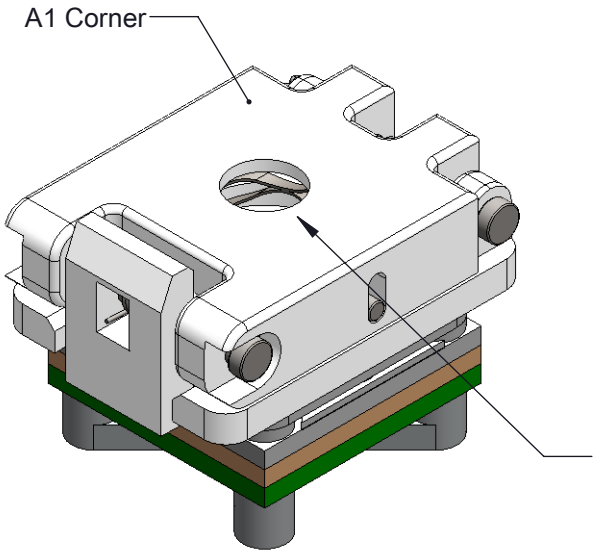
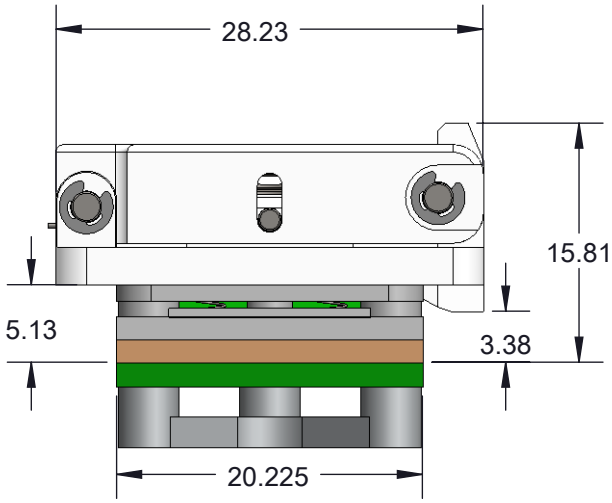
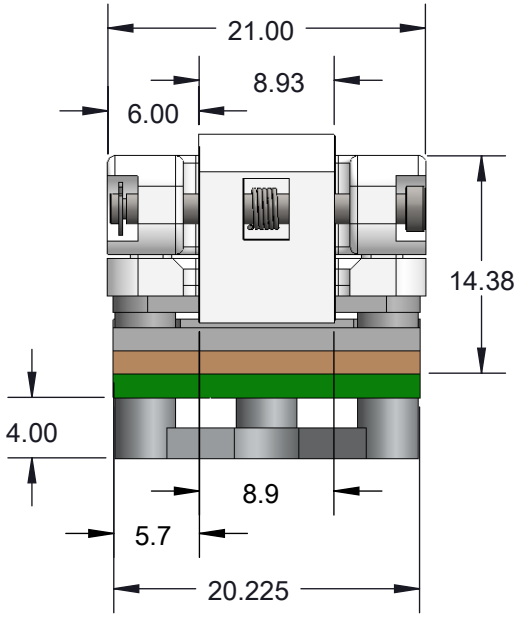
CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

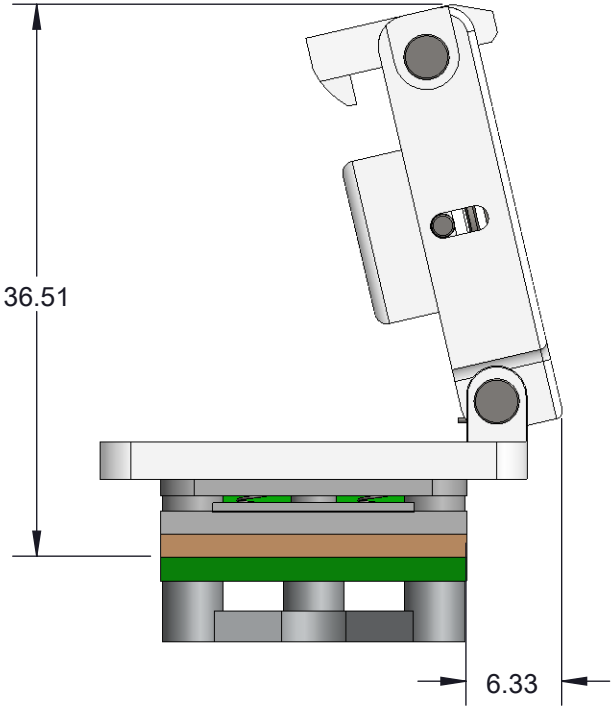


FEATURES:

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





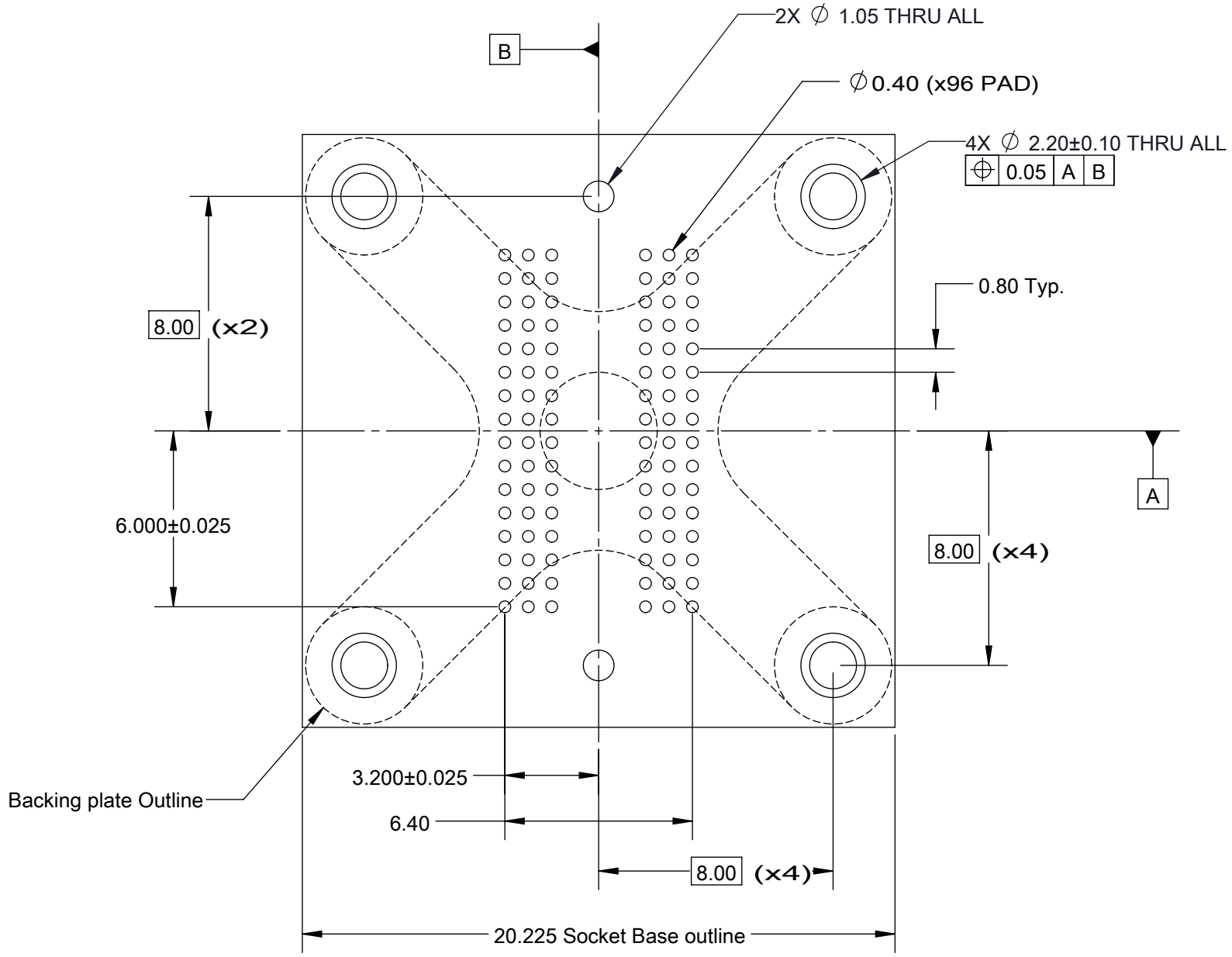


Description: Socket Specification

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-6018 Drawing	Material: Material <not specified>	STATUS: Approval Pending	SHEET: 1 OF 5	REV. C.03
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 13.66	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 2:1
		FILE: CBT-BGA-6018	DATE: 9/7/2012	

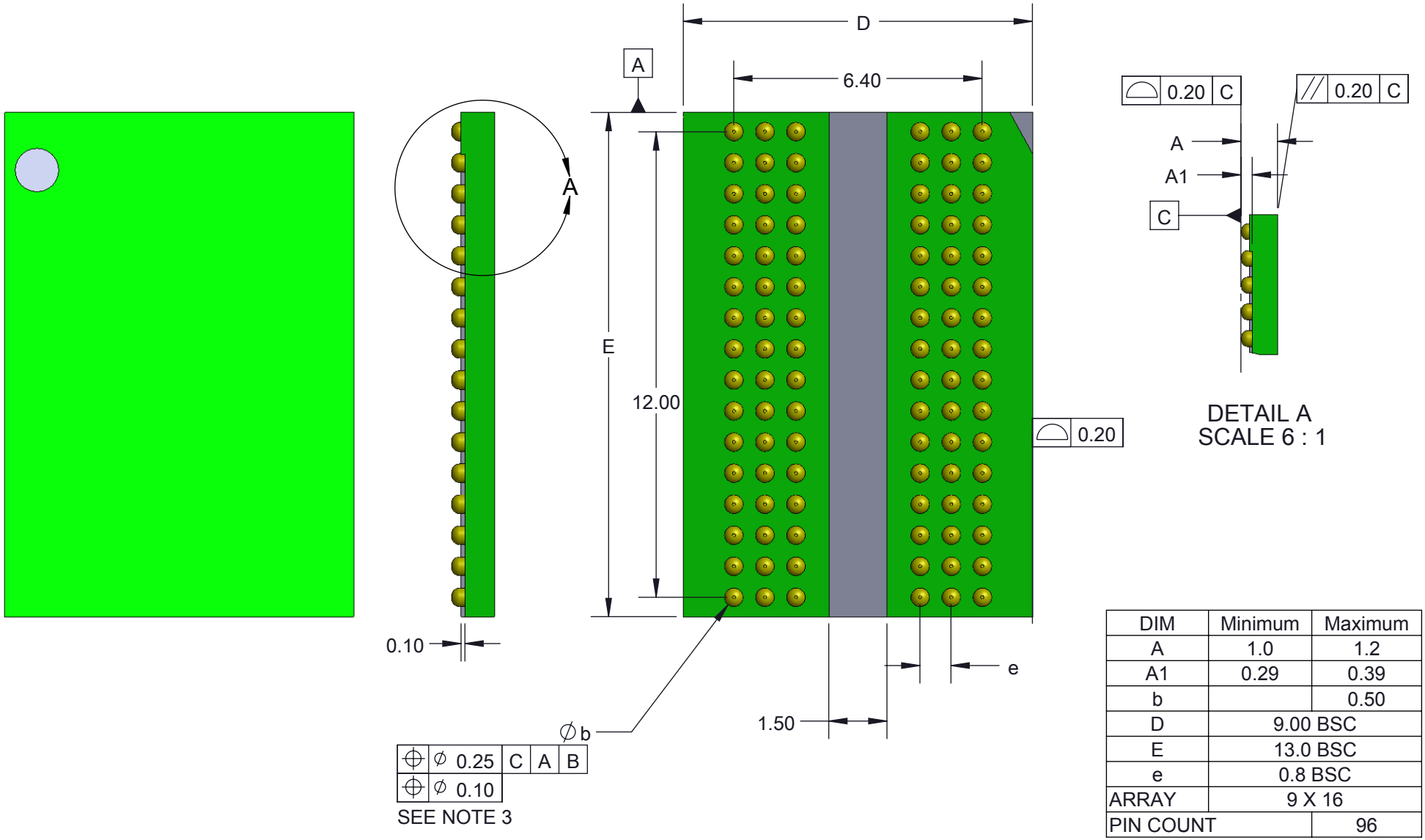


Description: Recommended Layout

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-6018 Drawing	Material: Material <not specified>	STATUS: Approval Pending	SHEET: 2 OF 5	REV. C.03
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 13.66	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 5:1
		FILE: CBT-BGA-6018	DATE: 9/7/2012	



DIM	Minimum	Maximum
A	1.0	1.2
A1	0.29	0.39
b		0.50
D	9.00 BSC	
E	13.0 BSC	
e	0.8 BSC	
ARRAY	9 X 16	
PIN COUNT		96

Ironwood Package Code: BGA96G

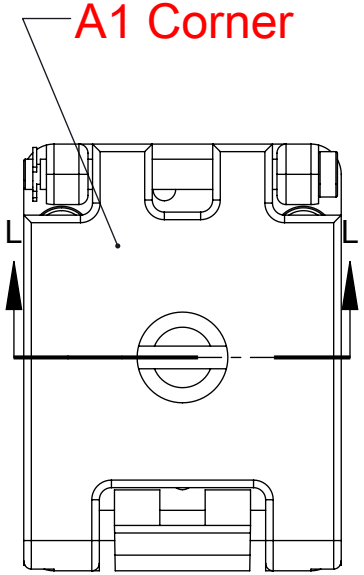
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane C.
4. Datum C (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall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

Description: Compatible BGA

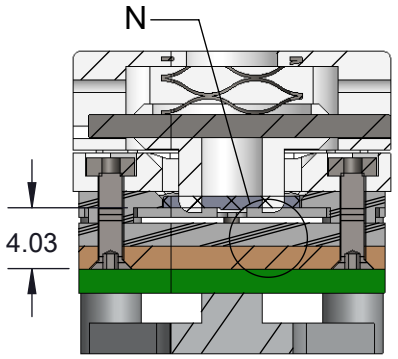
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

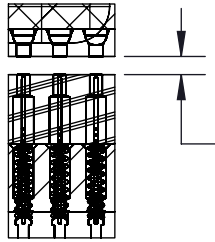
CBT-BGA-6018 Drawing	Material: Material <not specified>	STATUS: Approval Pending	SHEET: 3 OF 5	REV. C.03
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 13.66	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 7:1
		FILE: CBT-BGA-6018	DATE: 9/7/2012	



ITEM NO.	Description	Material
1	Bottom Guide BGA96 0.8mm pitch 9x16 array	Semitron MDS 100
2	Socket Base 9x13.3mm Snap Lid (Modified M2962 with posts removed and wider pocket)	PPS
3	12mm Plastic Snap Clamshell Socket Lid	PPS/Ultem
4	Clamshell Latch Snap Lid Socket	PPS/Ultem
5	Compression Plate Plastic Snap lid 10mm	PPS/Ultem
6	Middle guide BGA96 0.8mm pitch 9x16 array	PEEK Ceramic filled
7	BGA96 9x13mm 0.8mm pitch 9x16 array	FR4
8	Top Floating Guide BGA96 0.8mm pitch 9x16 array	PEEK Ceramic filled
9	SBT Pin, SBT-BGA 0.5mm-0.8mm	
10	Floating Guide Spring	Alloy Steel (SS)
11	Dowel Pin, M1.5 X 20mm LG, 18-8 SS	AISI 347 Annealed Stainless Steel (SS)
12	Torsion Spring, 180 0.109" OD, Ccw/Rh	Steel Music Wire
13	2mm diameter Hinge Pin, 20 mm long	Alloy Steel
14	Wave Spring 0.375"OD 0.15" ln 100lbs/in	Steel Music Wire
15	Nut, #0-80 x 3/64", SS	1023 Carbon Steel Sheet (SS)
16	Snap ring for 2mm Hinge pin 0.15" OD	
17	#0-80X0.25", 90 deg., head pin guide screw, Peek material	PEEK unfilled
18	Dowel Pin, M1 x 6mm, STL	Alloy Steel (SS)
19	IC Guide 9x13mm IC	PEEK Ceramic filled
20	PCB BGA96 0.8mm pitch 9x16 array	Material <not specified>
21	Screw, M2 x 10mm, Cap, SS STL	AISI 316 Stainless Steel Sheet (SS)
22	Backing Plate 5 post	7075-T6 Alumium Alloy

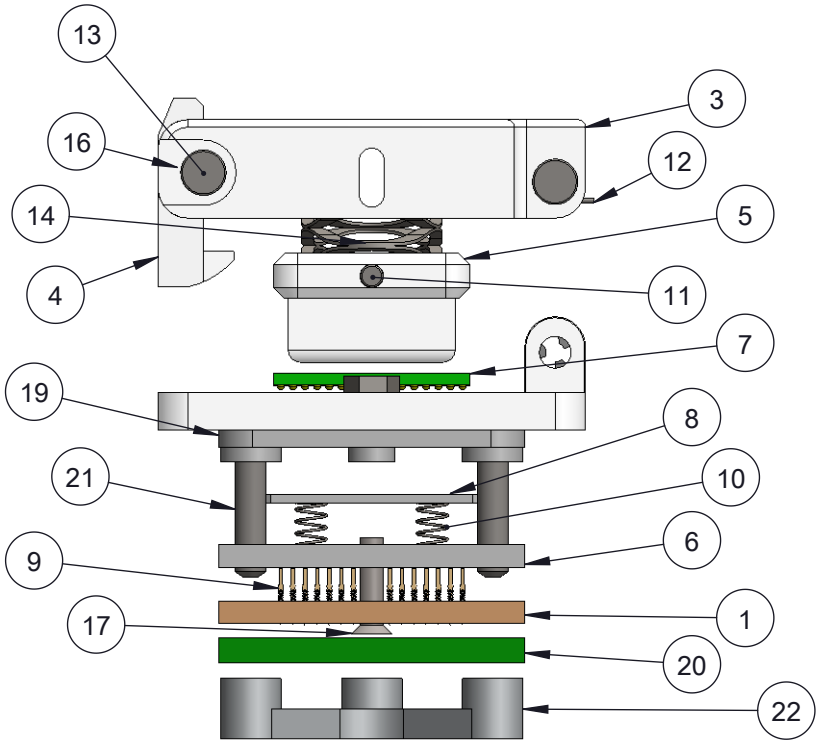


SECTION L-L



0.40
Top side compression

DETAIL N
SCALE 6 : 1

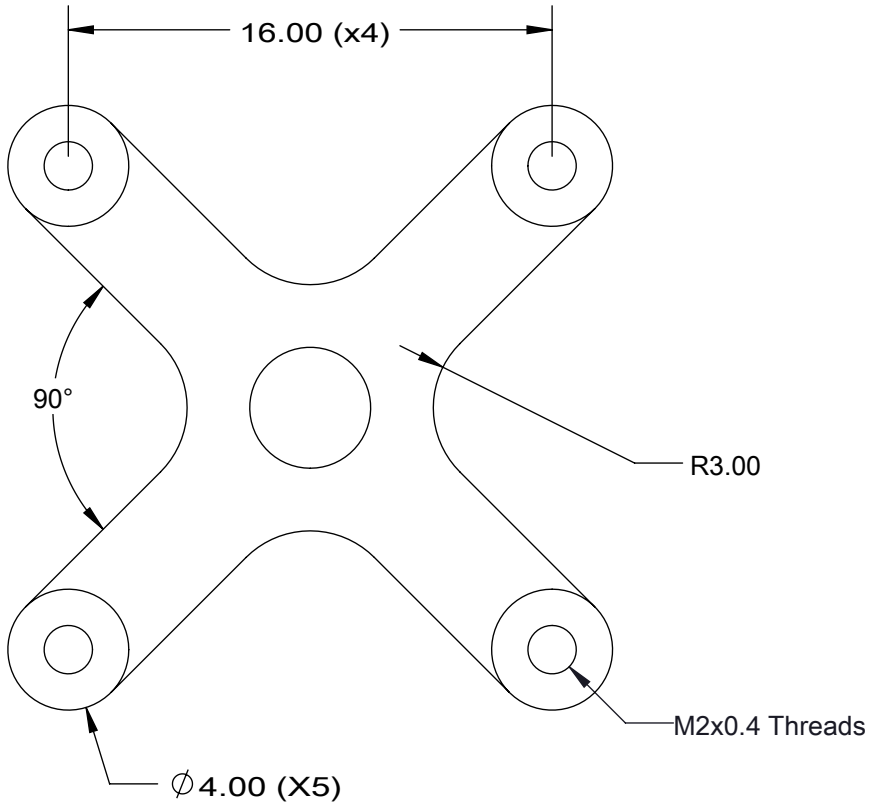


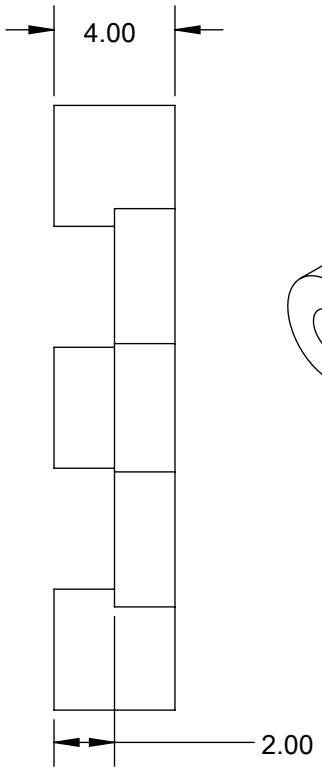
Description: Socket Assy, Insulation Plate

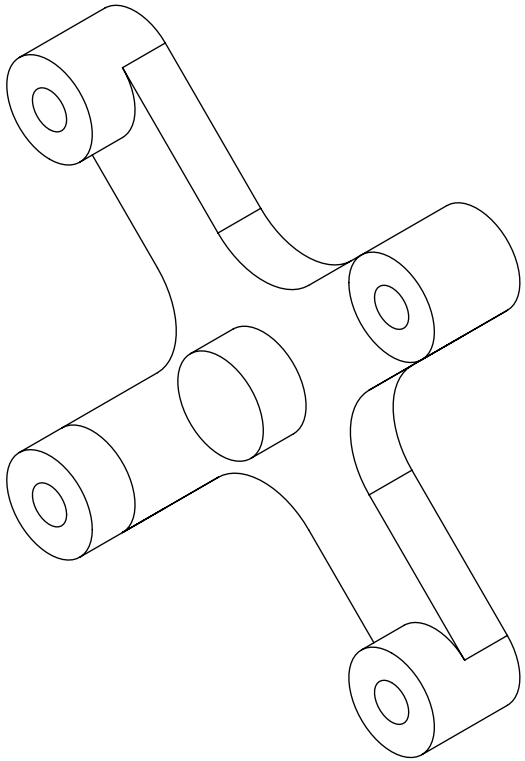
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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-6018 Drawing	Material: Material <not specified>	STATUS: Approval Pending	SHEET: 4 OF 5	REV. C.03
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 13.66	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 2:1
		FILE: CBT-BGA-6018	DATE: 9/7/2012	







Rev	Date	Initials	Description
A	9/7/12	VP	Original
B	5/8/13	VP	Added Backing plate and removed Thru Hole adapter assembly
C	02/18/14	DH	Changed current rating of pin
D	3/31/15	RP/MR	P-P196A was P-P149A, R3182 was R1392

Description: Backing Plate

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-6018 Drawing	Material: Material <not specified>	STATUS: Approval Pending	SHEET: 5 OF 5	REV. C.03
Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: Weight: 13.66	ENG: V. Panavala	DRAWN BY: V. Panavala	SCALE: 4:1
		FILE: CBT-BGA-6018	DATE: 9/7/2012	