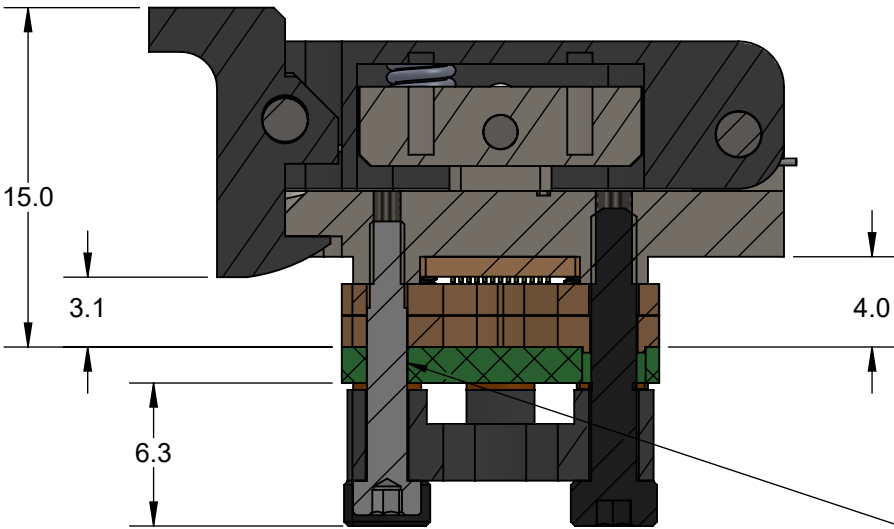
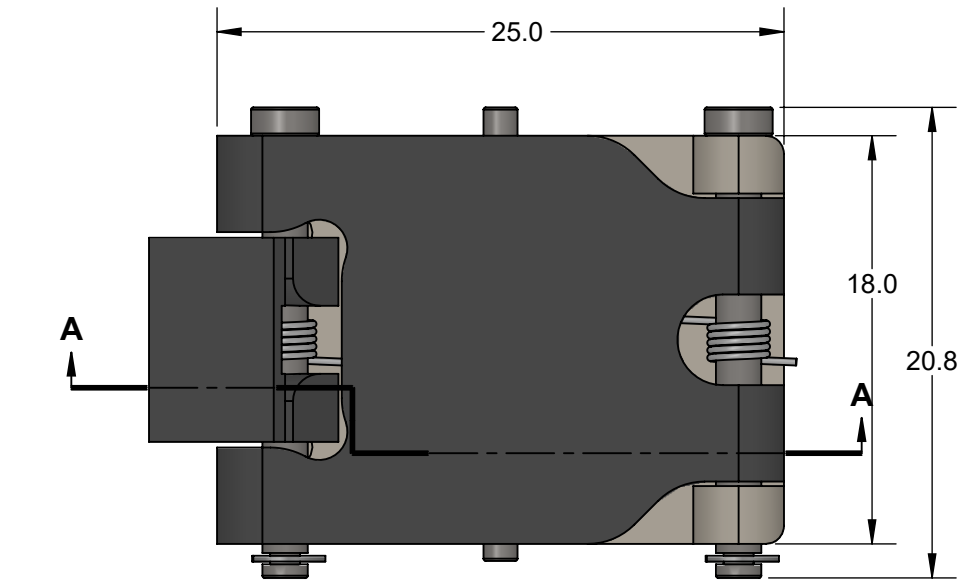
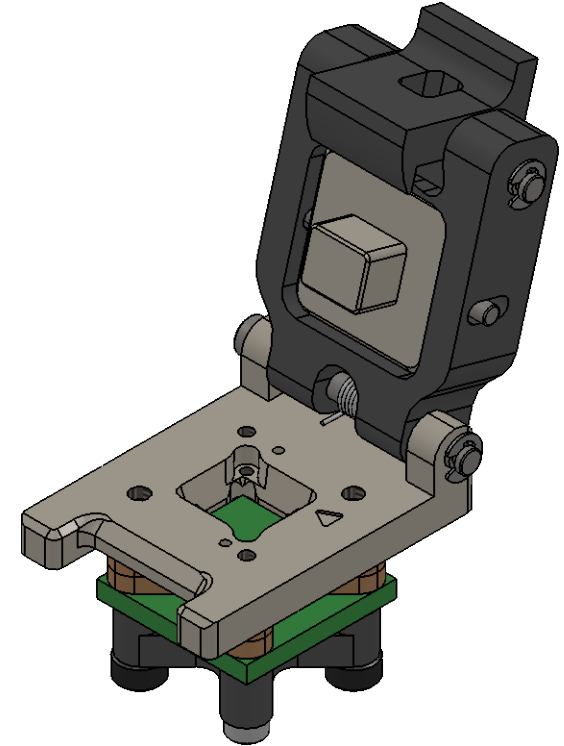


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



FEATURES:

- Wide temperature range (-55C to +135C)
- High current capability (up to 0.5A)
- 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




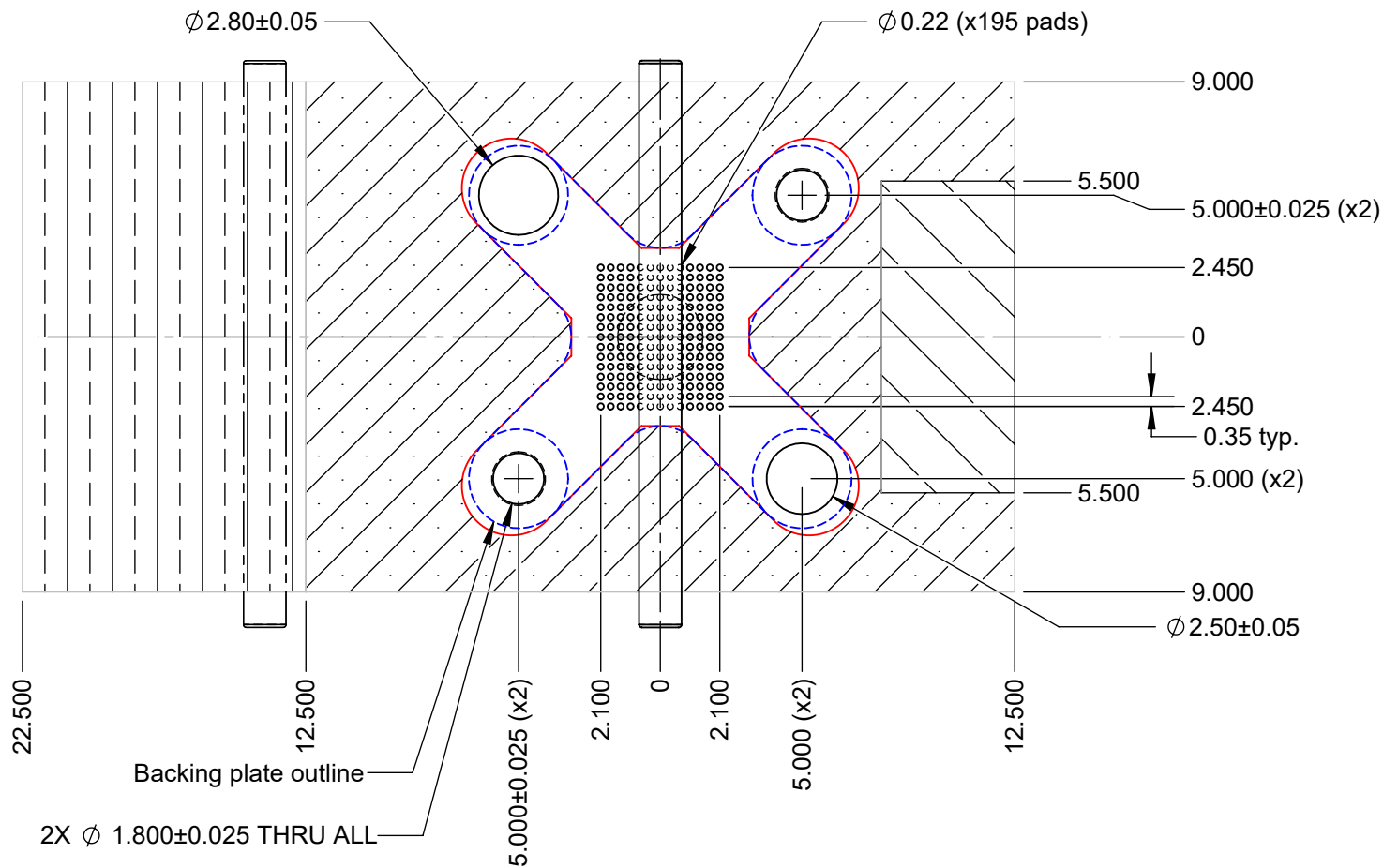
To make proper alignment when mounting the socket to the PCB insert the smaller shoulder screws before inserting the larger cap screws

Description: CBT-BGA195 13x15 array 0.35mm pitch Snap Lid

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-3000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 13.69	STATUS: Released	SHEET: 1 OF 4	REV. A
	ENG: B. Schatz	DRAWN BY: M. Raske	DATE: 06/15/2016	SCALE: 3:1




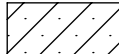

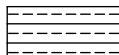
Target PCB Recommendations


Target PCB Recommendations
 Total thickness: 1.0mm ± 10%
 Pads: Hard Gold, ENIPIG,
 RoHS HASL
 Hard Gold spec:
 50 Micro-Inches Gold over
 200 Micro-Inches Nickel over
 1/2-1 Oz copper
 PCB Pad height: No Solder
 mask or 0.001" mask
 thickness is acceptable.
 Copper defined solder mask
 and SMOBC is recommended

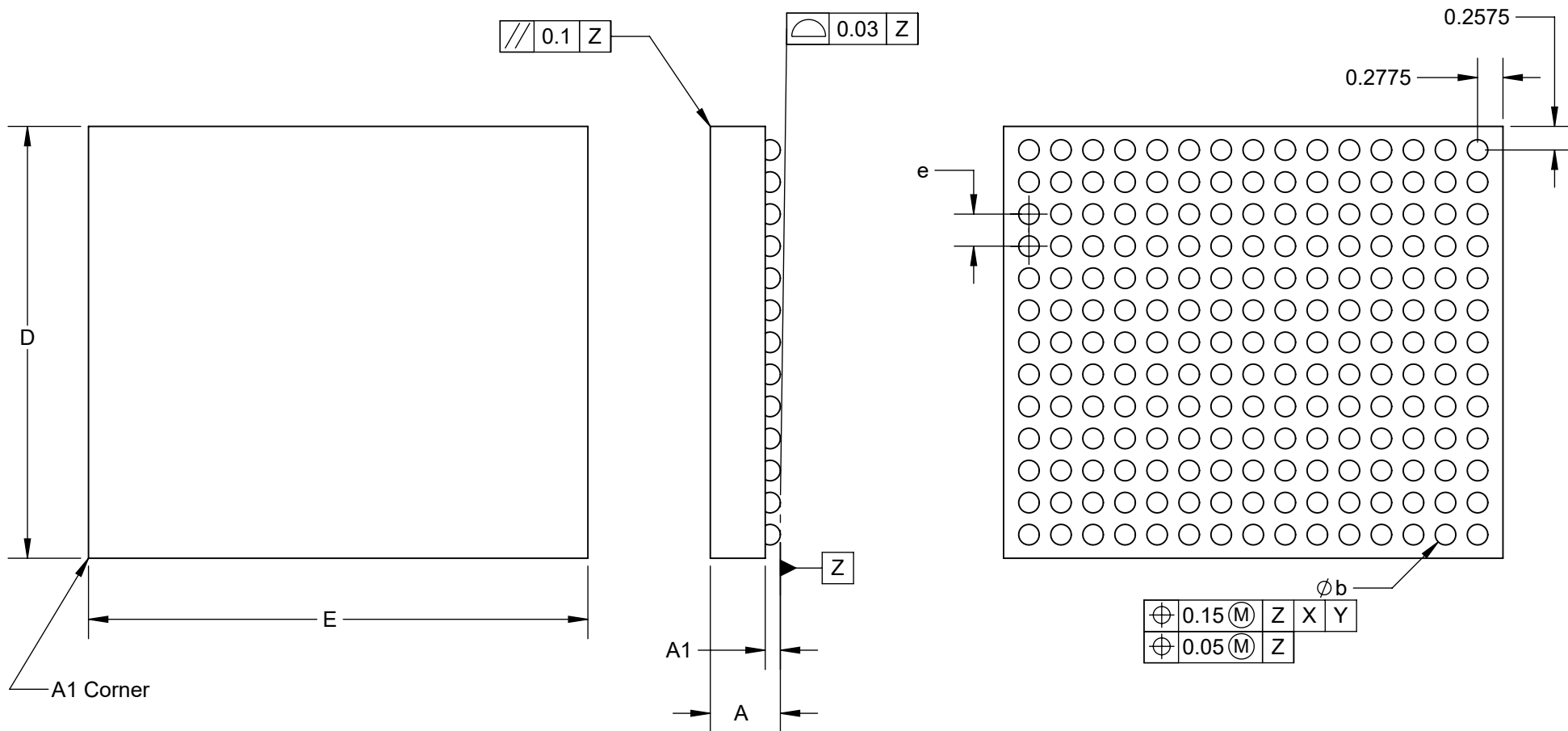
Description: Recommended PCB Layout

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.

-  = Bottom guide outline keep out area
-  = Socket base outline max component height of 4mm
-  = Latch outline max component height of 2.5mm
-  = Open Lid outline max component height of 6mm

	CBT-BGA-3000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 13.69	STATUS: Released ENG: B. Schatz FILE: CBT-BGA-3000 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 06/15/2016	REV. A SCALE: 4:1



ϕ	0.15	(M)	Z	X	Y
ϕ	0.05	(M)	Z		


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.

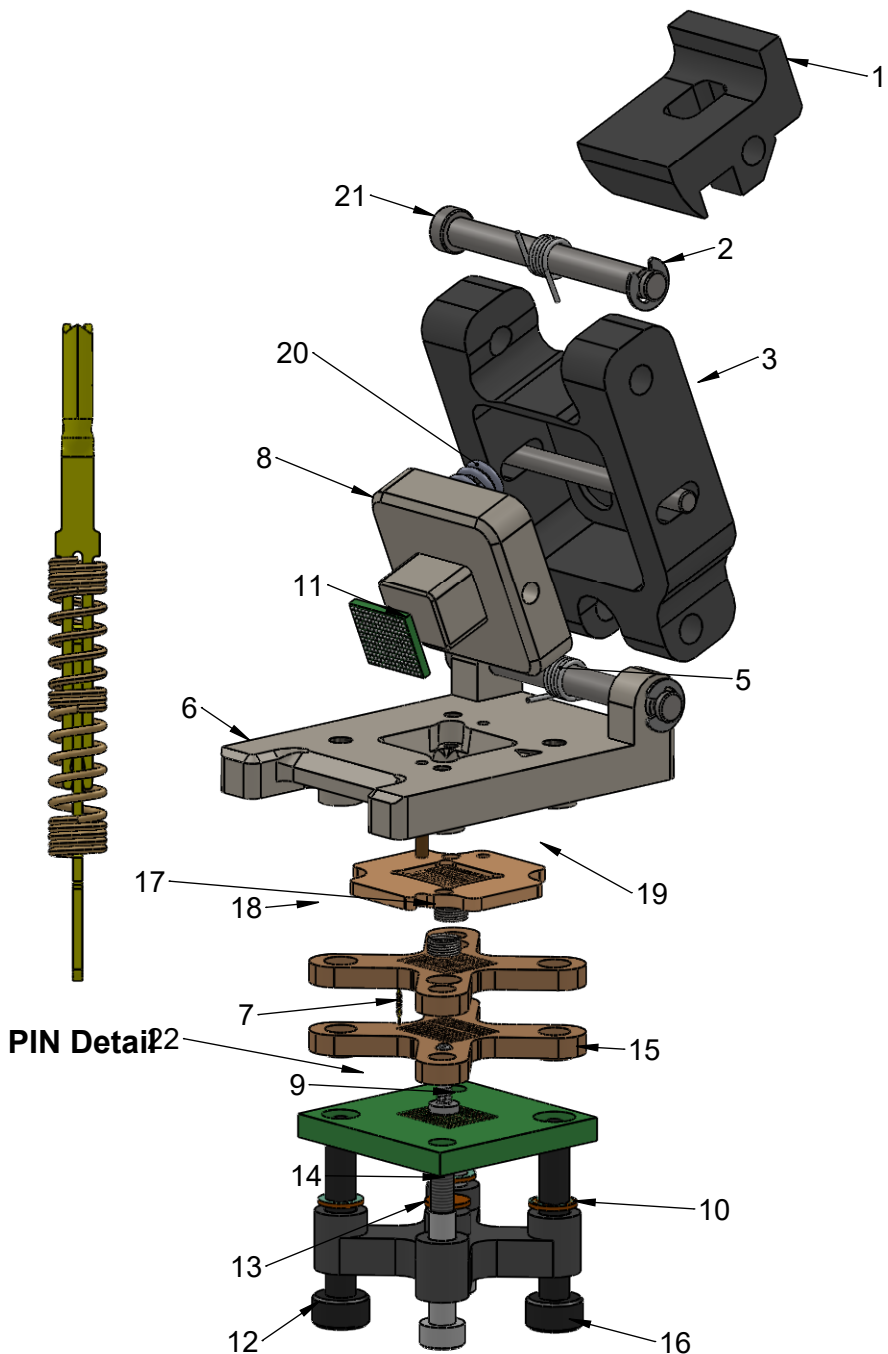
Description: Compatible BGA

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

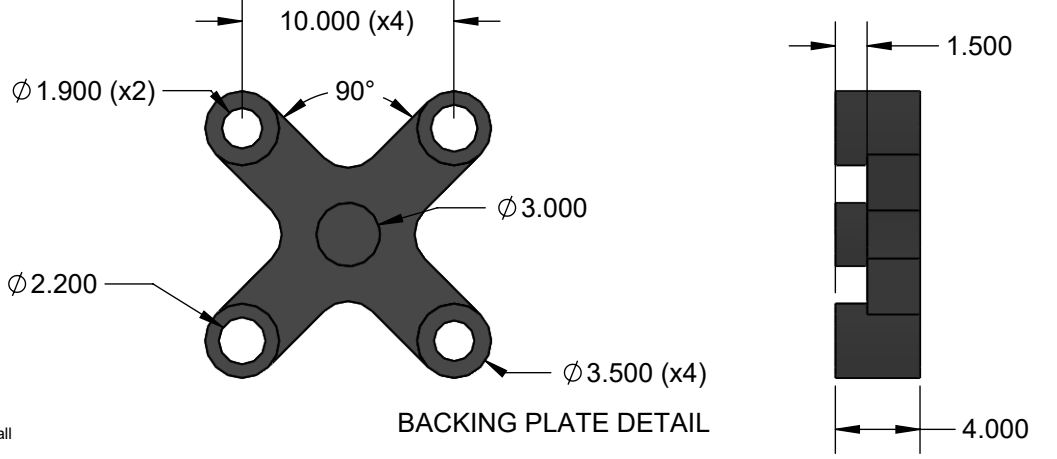
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [± 0.001 "], Pitches (from true position) $\pm 0.025\text{mm}$ [± 0.001 "], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without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

DIM	Minimum	Maximum
A	0.454	0.55
A1	0.15	0.18
b	0.195	0.255
D	4.715 BSC	
E	5.455 BSC	
e	0.35 BSC	
ARRAY	13 x 15	
PIN COUNT	195	

 CBT-BGA-3000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 13.69	STATUS: Released ENG: B. Schatz FILE: CBT-BGA-3000 Dwg	SHEET: 3 OF 4 DRAWN BY: M. Raske DATE: 06/15/2016	REV. A SCALE: 15:1




ITEM NO.	DESCRIPTION	Material
1	Latch	PPS
2	Snap ring	Steel
3	Socket Lid	PPS
4	Lid pin	Steel
5	Torsion Spring	Steel
6	Alignment Pin	Steel
7	Stamped Pin, 0.35mm SBT-BGA	N/A
8	Spring pin	Au/Ni plated
9	Target PCB	FR4 High temp
10	Insulating washer	Kapton
11	Mounting Screw	Steel
12	Backing Plate	Aluminum
13	Insulating circle	Kapton
14	Target PCB	N/A
15	Bottom Guide BGA195 0.35mm pitch	Semitron MDS 100
16	Socket Base	Aluminum
17	Floating guide spring	Steel
18	Compatible BGA	N/A
19	Floating Guide BGA195 0.35mm pitch	Aluminum
20	Wave Spring	Steel
21	Hinge Pin	Steel
22	Metric Cheese Head Slotted Machine Screw, M1 Size, 4 mm Length, .25 mm Pitch	18-8 Stainless Steel
23	Alignment Pin 1/32" dia. x1.75mm lng Brass	Brass 360



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-3000 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 13.69	STATUS: Released ENG: B. Schatz FILE: CBT-BGA-3000 Dwg	SHEET: 4 OF 4 DRAWN BY: M. Raske DATE: 06/15/2016	REV. A SCALE: 2:1
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