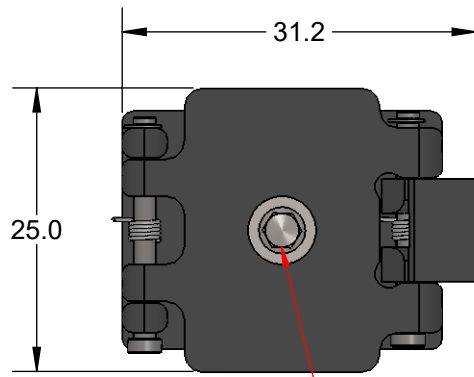


GHZ BGA Socket - Direct mount, solderless

Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Hinged clamshell socket lid

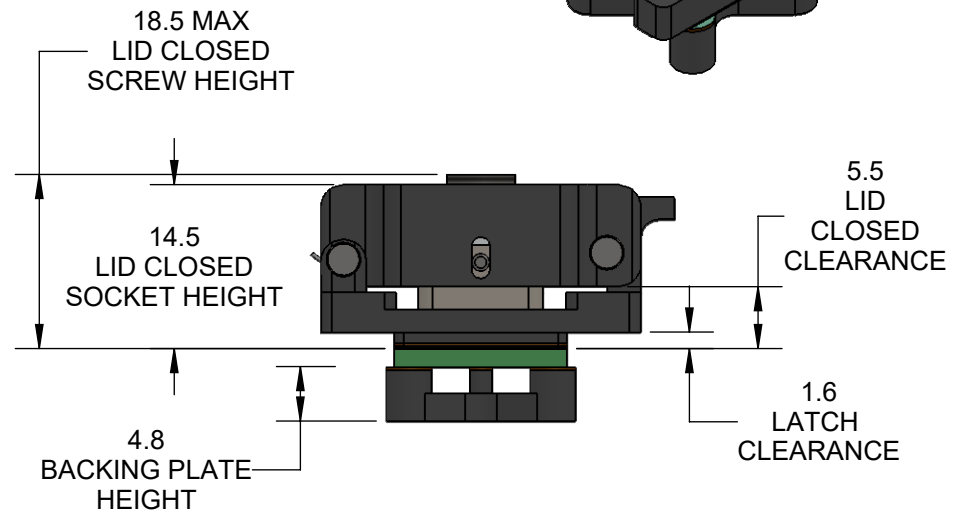
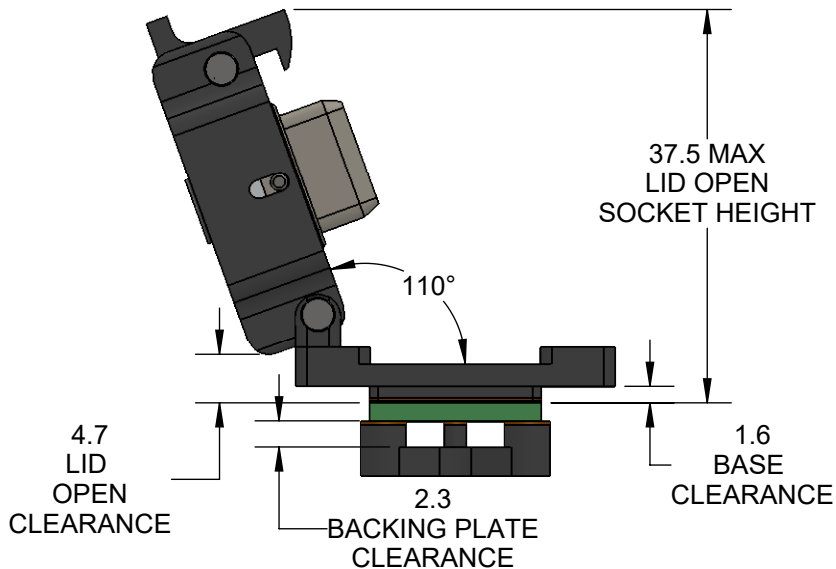
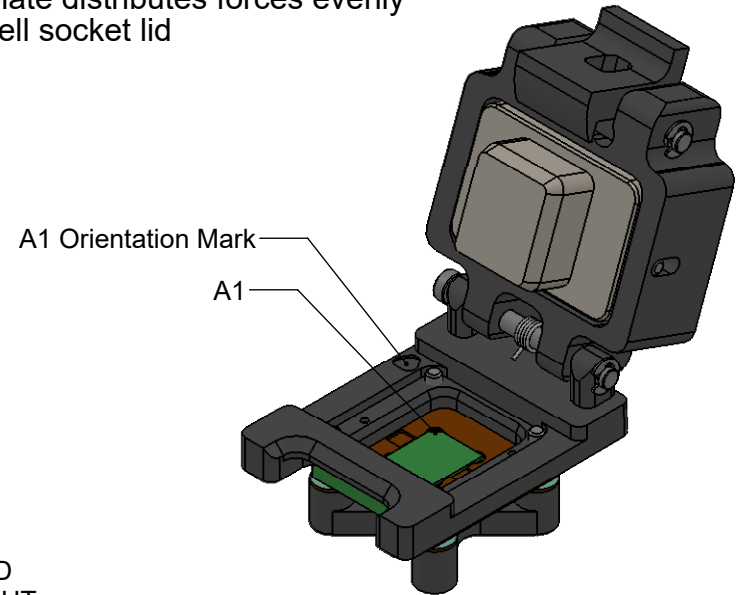


Operating instructions

Starting with the lid open:

1. Relieve pressure on the compression screw
2. Close lid
3. Apply 1.5 lbf-in torque to screw, using calibrated torque driver


Recommended Torque Tool: TL-TORQUEDRIVER-01



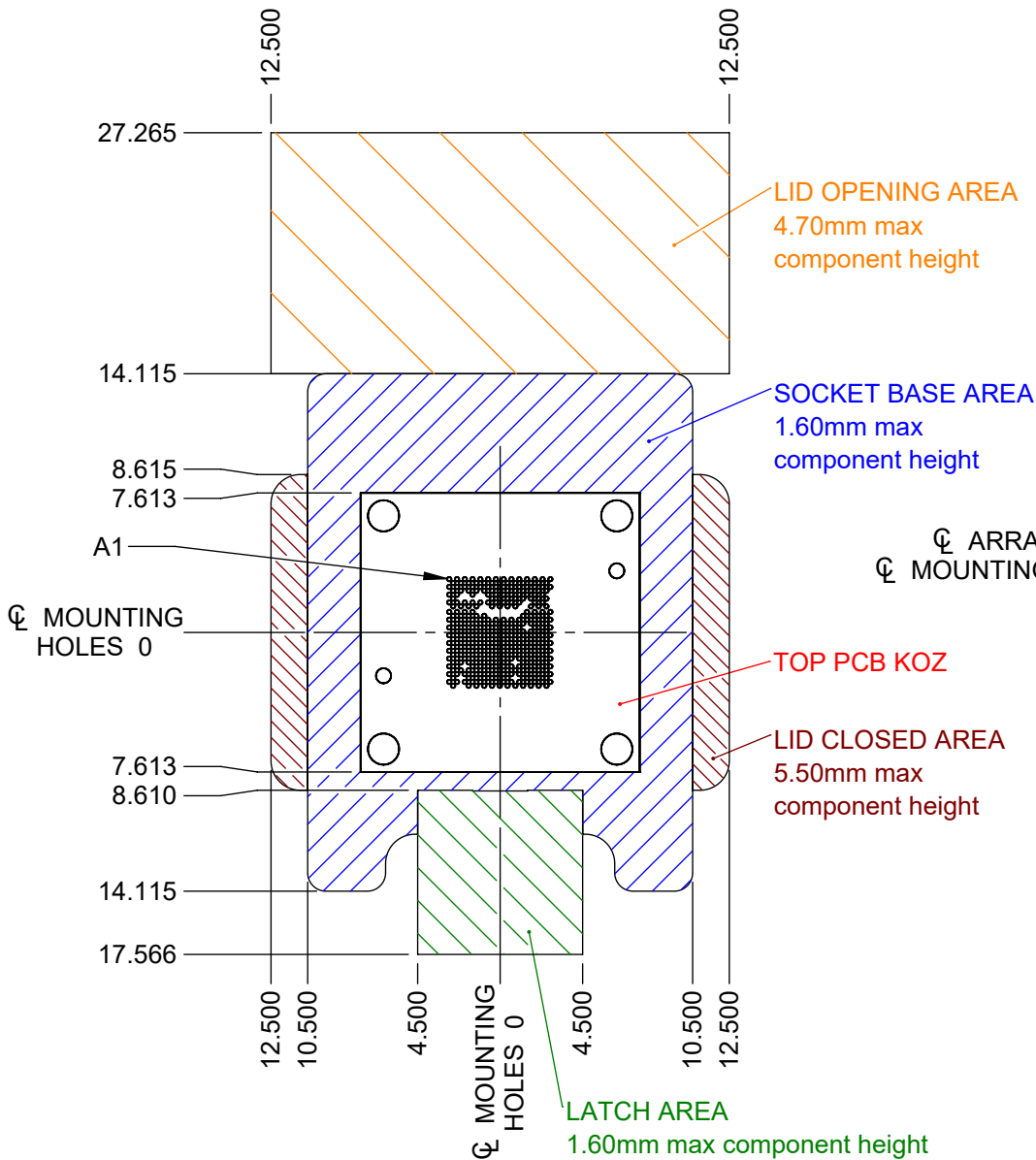
Description: CG-BGA351 6.28x5.98mm 27x28 0.3mm pitch, clamshell lid

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

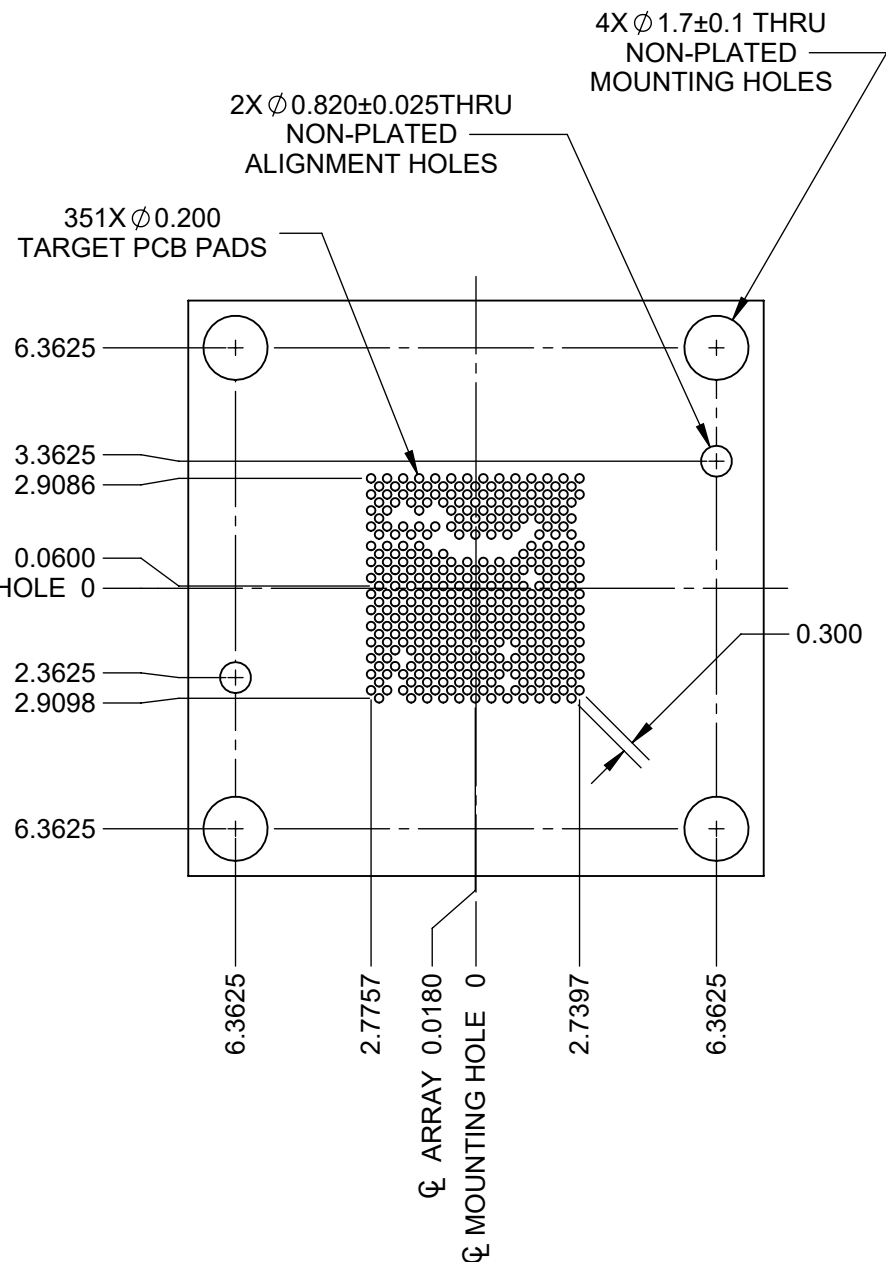
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [± 0.001 "], Pitches (from true position) $\pm 0.025\text{mm}$ [± 0.001 "], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without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

 C17134 Drawing ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 19.15	STATUS: Released ENG: B. Schatz FILE: CG15-BGA-1000 Dwg	SHEET: 1 OF 4 DRAWN BY: M. Newby DATE: 10/11/2017	REV. A SCALE: 3:2

**TOP VIEW
KEEP OUT DETAIL**




**TOP VIEW
HOLE AND PAD DETAIL**

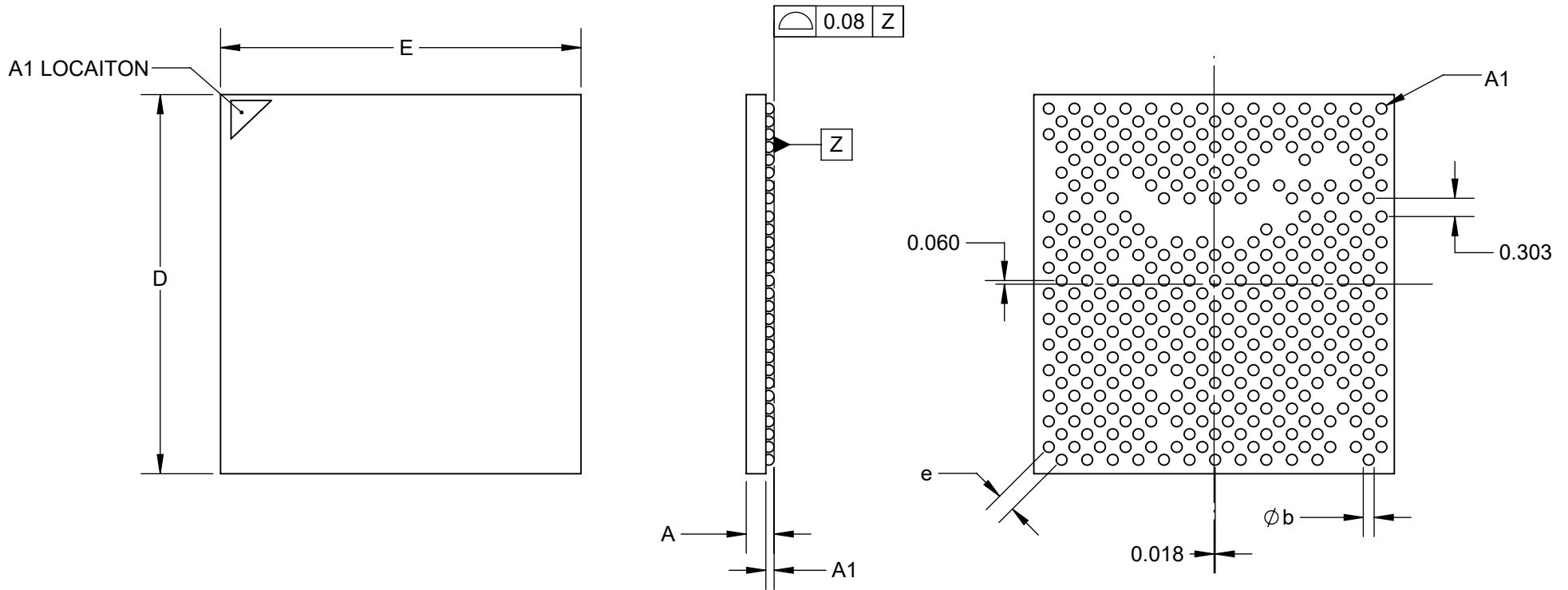


Description: Recommended PCB Layout

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

Tolerances: Hole diameters \pm 0.0254mm [\pm 0.001"], Pitches (from true position) \pm 0.0762mm [\pm 0.003"], substrate thickness tolerance \pm 10%, all other tolerances \pm 0.127mm [\pm 0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 <p>C17134 Drawing ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 19.15</p>	<p>STATUS: Released ENG: B. Schatz FILE: CG15-BGA-1000 Dwg</p>	<p>SHEET: 2 OF 4 DRAWN BY: M. Newby DATE: 10/11/2017</p>	<p>REV. A SCALE: 5:2</p>



Ironwood package code: BGA351A

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.


DIM	Minimum	Maximum
A	0.414	0.494
A1	0.099	0.159
b	0.155	0.215
D*	6.232	6.332
E*	5.926	6.026
e	0.3 x 45°	
ARRAY	28 x 27	
PIN COUNT	351	

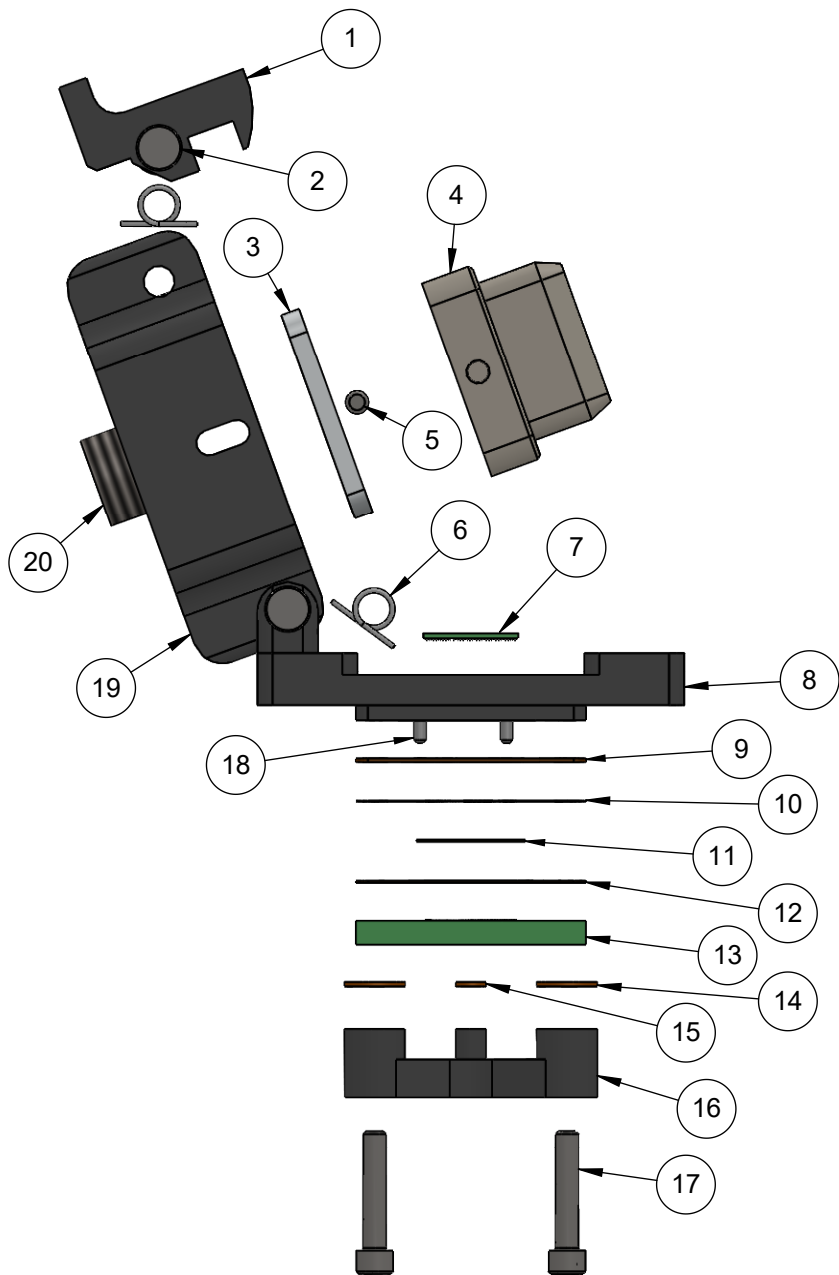
Description: Compatible BGA

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.

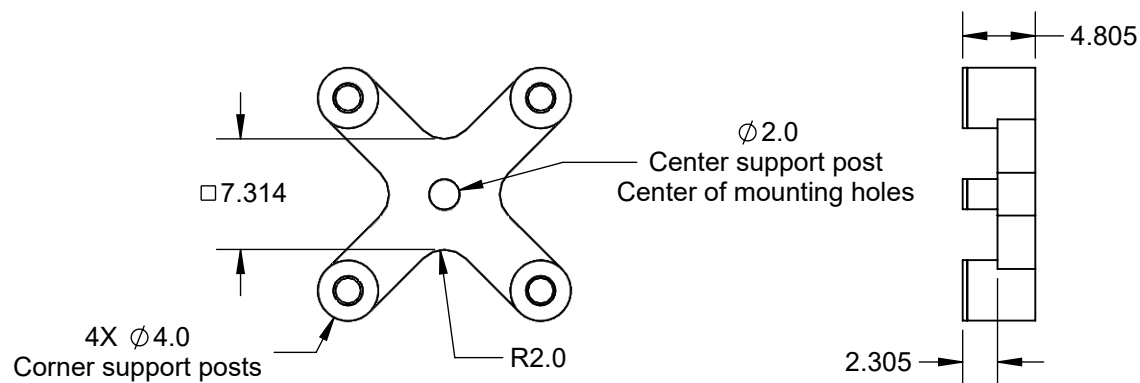
***Socket is designed to work with BGAs of size D=6.232 - 6.332, E = 5.926 - 6.026**

 C17134 Drawing ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 19.15	STATUS: Released ENG: B. Schatz FILE: CG15-BGA-1000 Dwg	SHEET: 3 OF 4 DRAWN BY: M. Newby DATE: 10/11/2017	REV. A SCALE: 10:1



ITEM NO.	DESCRIPTION	MATERIAL
1	Latch	Aluminum
2	Hinge/Lid pin	Steel
3	Spacer	Aluminum
4	Compression plate	High temp plastic
5	Lid pin	Steel
6	Latch/Hinge spring	Steel
7	Compatible BGA	N/A
8	Base	Aluminum
9	IC Guide	Kapton Polyimide/Cirlex
10	Ball Guide	Kapton Polyimide/Cirlex
11	0.15mm thick, 0.032x 0.05mm pitch, Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symettrically in a silicon rubber (63.5 degree angle), Thickness: 0.15mm
12	Elastomer guide	Kapton Polyimide/Cirlex
13	Target PCB	N/A
14	Insulating washer	High temp plastic
15	Insulating circle	High temp plastic
16	5 post backing plate	Aluminun
17	Mounting screws	Steel
18	Alignment pin	Steel
19	Lid	Aluminum
20	Compression screw	Steel


BACKING PLATE DETAIL



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.

 C17134 Drawing ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 19.15	STATUS: Released ENG: B. Schatz FILE: CG15-BGA-1000 Dwg	SHEET: 4 OF 4 DRAWN BY: M. Newby DATE: 10/11/2017	REV. A SCALE: 2:1