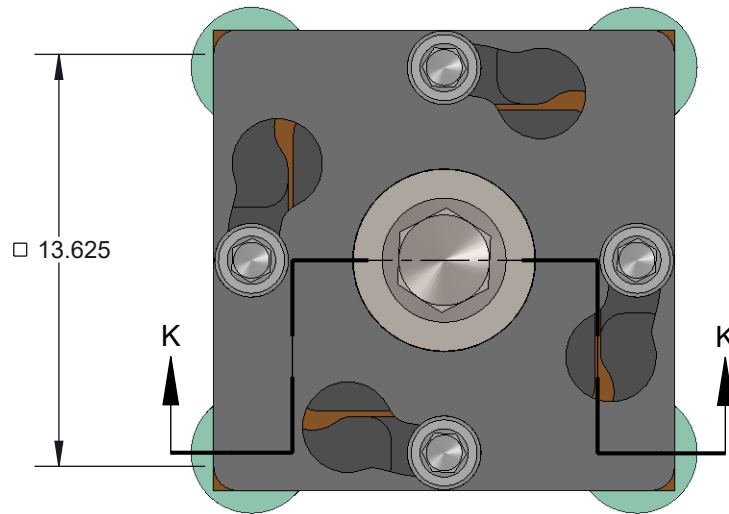
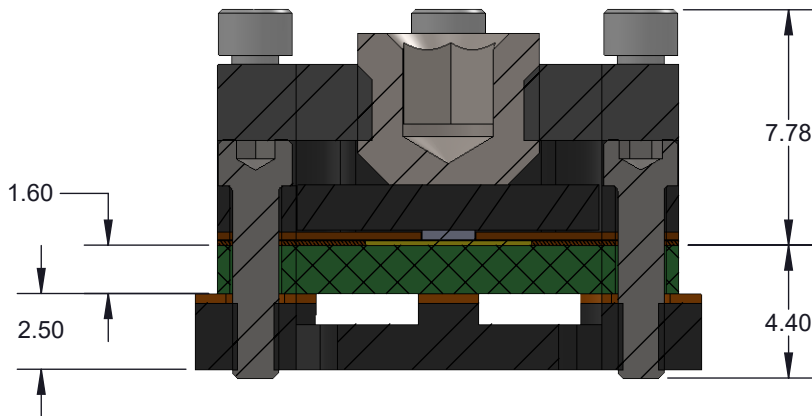


SG15-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR TEST APPLICATIONS



TOP VIEW



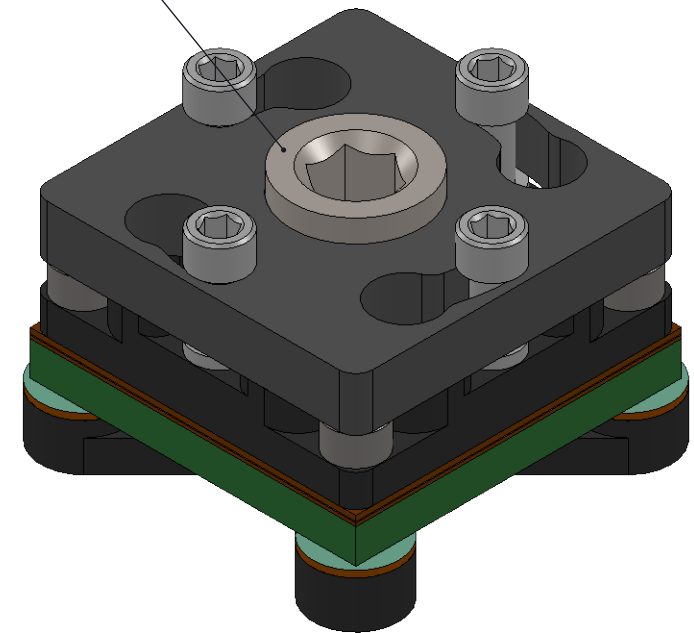
SECTION K-K

FEATURES:

- Directly mounts to target PCB (needs tooling holes) with hardware.
- Over 40GHz bandwidth @-1dB
- Low and stable contact resistance for reliable production yield.
- Self inductance under 0.025nH.
- Compression plate distributes forces evenly
- Easily removable swivel socket lid

Required Torque: 0.07 Ncm (1 Ozf in)


Recommended tool: R3202



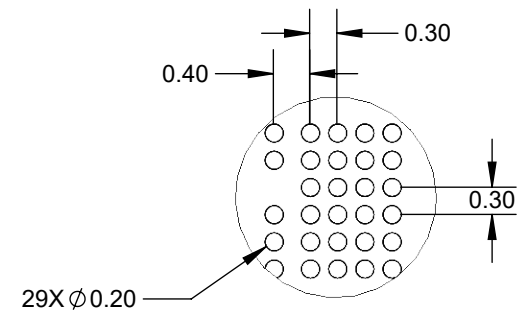
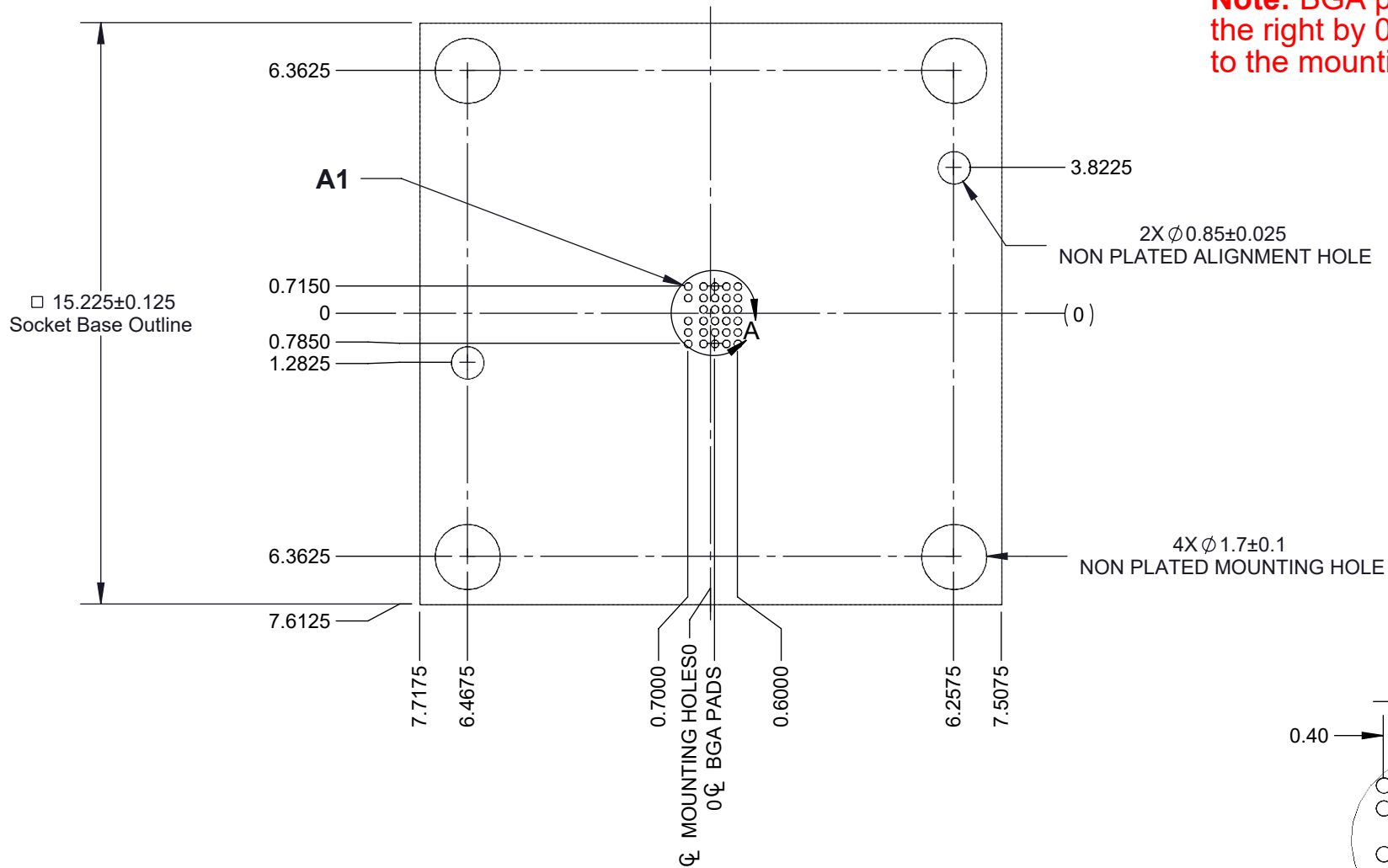
Description: Socket for 1.74x2.05 0.4x0.3mm pitch BGA29

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>©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Material <not specified> Finish: Weight: 5.54</p>	STATUS: Released	SHEET: 1 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SG15-BGA-1007 Dwg	DATE: 01/19/2017	

Note: BGA pattern is shifted to the right by 0.075mm with respect to the mounting holes,




DETAIL A
SCALE 12 : 1

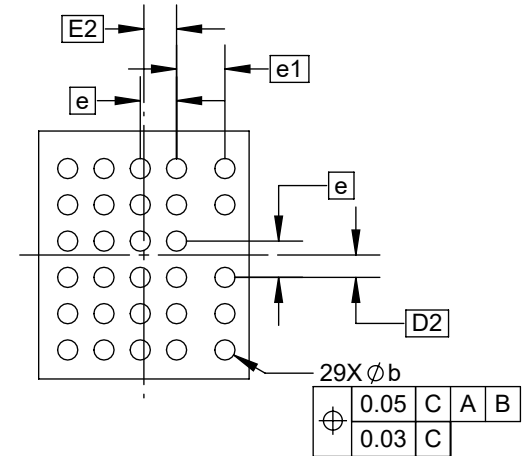
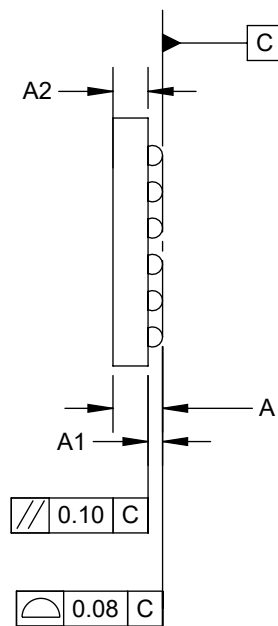
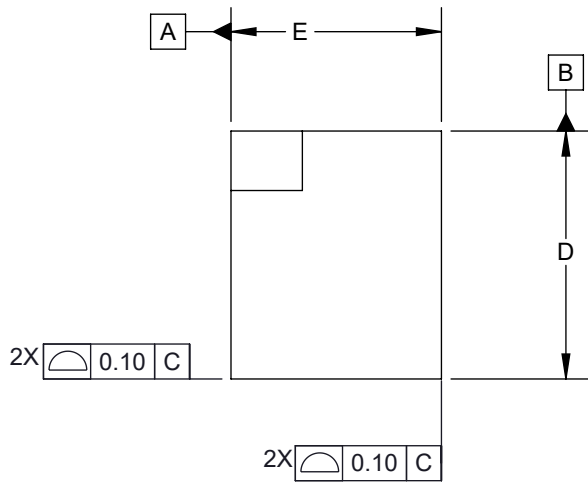
Target PCB Recommendations
 Total thickness: 1.6mm min.
 Plating: ENIPIG, Solder Finish, Hard Gold
 PCB Pad height: Same or 0.001"-0.002" lower than solder mask is acceptable
 Solder mask opening: 0.013"

Description: Recommended PCB Layout

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

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

 SG15-BGA-1007 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 5.54	STATUS: Released ENG: E. Smolentseva FILE: SG15-BGA-1007 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 01/19/2017	REV. A SCALE: 6:1



NOTES:


1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. COPLANARITY APPLIES TO SPHERICAL CROWNS OF SOLDER BALLS.
4. DATUM C, THE SEATING PLANE, IS DEFINED BY THE SPHERICAL CROWNS OF SOLDER BALLS.
5. DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO DATUM C.

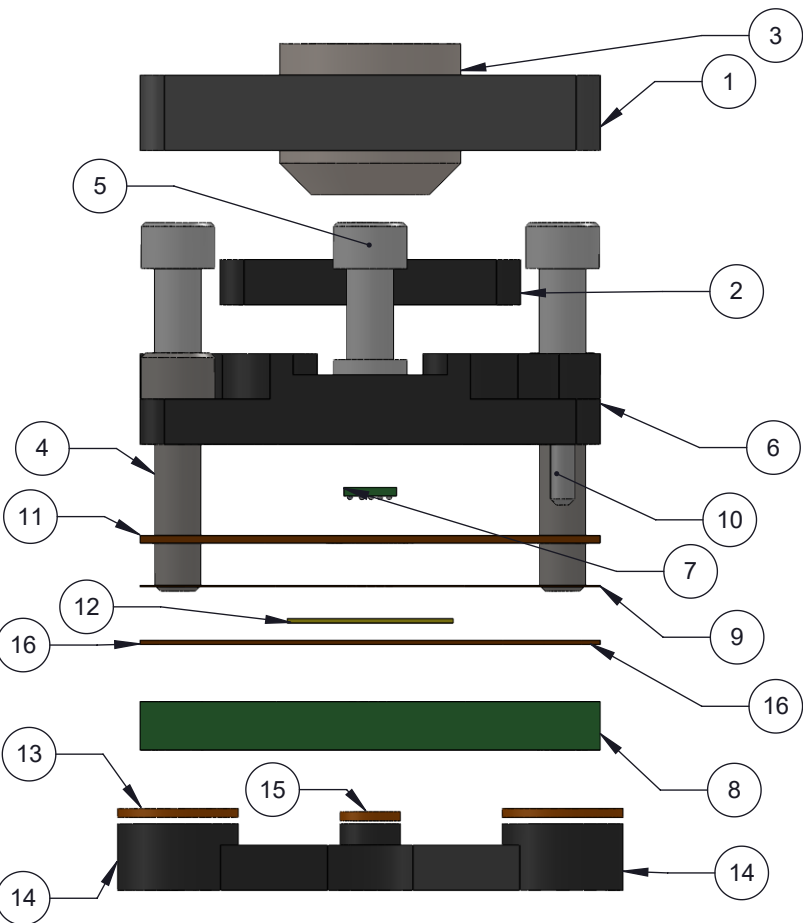
DIM	Minimum	Maximum
A	-	0.46
A1	0.09	0.15
A2	0.29 REF	
b	0.12	0.18
D	2.05 BSC	
D2	0.185 BSC	
E	7.0 BSC	
E2	0.27 BSC	
e	0.3 BSC	
e1	0.4 BSC	
ARRAY	5X6	
PIN COUNT	29	

Description: Compatible BGA

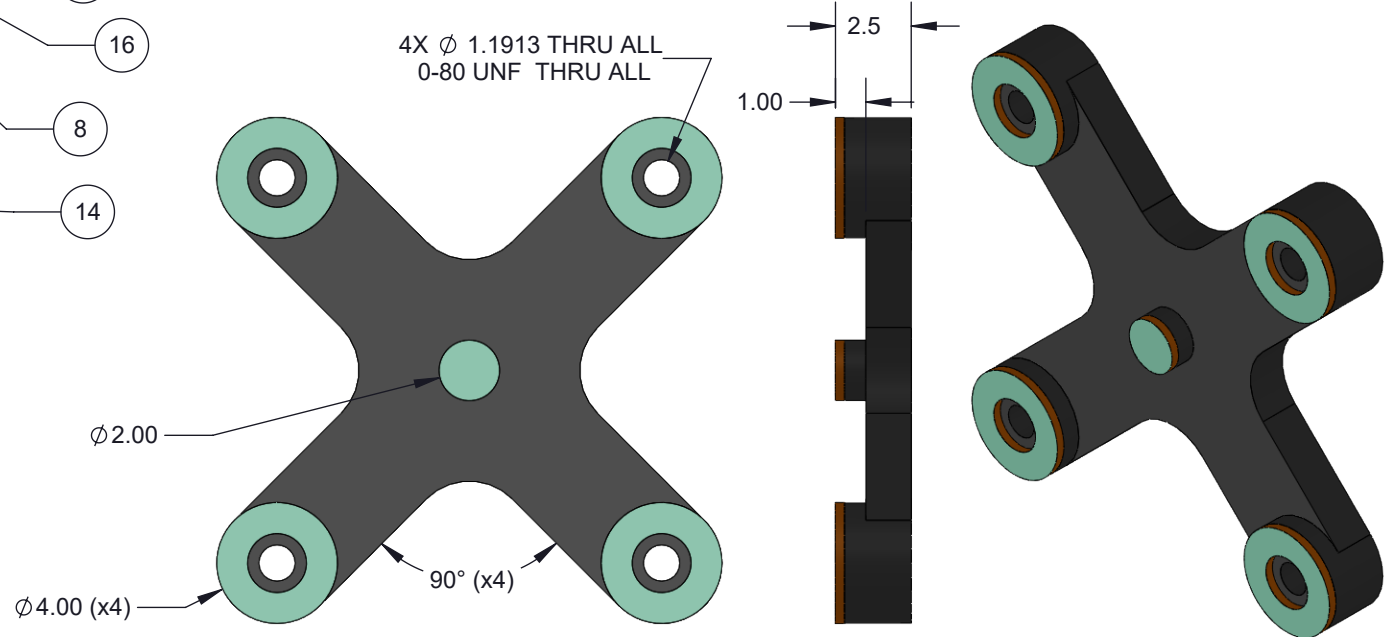
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

 SG15-BGA-1007 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Material <not specified> Finish: Weight: 5.54	STATUS: Released ENG: E. Smolentseva FILE: SG15-BGA-1007 Dwg	SHEET: 3 OF 4 DRAWN BY: M. Raske DATE: 01/19/2017	REV. A SCALE: 16:1




ITEM NO.	DESCRIPTION	Material
1	Socket Lid	7075-T6 Aluminum Alloy
2	Compression Plate 9.95 x 1.5mm	7075-T6 Aluminum Alloy
3	Compression Screw M6x1	Stainless Steel (18-8)
4	#0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
5	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
6	GHz Socket Base 10mm IC 3mm Thk	7075-T6 Aluminum Alloy
7	Test Chip	Material <not specified>
8	Customer's target PCB	FR4
9	Ball Guide	Kapton Polyimide/Cirlex
10	Alignment Pin 1/32" dia. x 1/8" lng	Chrome Stainless Steel
11	IC Guide 7mm IC	Kapton Polyimide/Cirlex
12	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: 0.5mm
13	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
14	10x10mm 5 post backing plate	7075-T6 Aluminum Alloy
15	Insulating disk, 2mm OD with 2 mil thk Adesive	Kapton Polyimide/Cirlex
16	Elastomer Guide for 5mm IC	20 Micron dia gold plated brass filaments arranged symettrically in a silicon rubber (63.5 degree angle)



Description: Socket Specification

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.

Backing Plate Specification

 <p>SG15-BGA-1007 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: Material <not specified> Finish: Weight: 5.54</p>	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SG15-BGA-1007 Dwg	DATE: 01/19/2017	