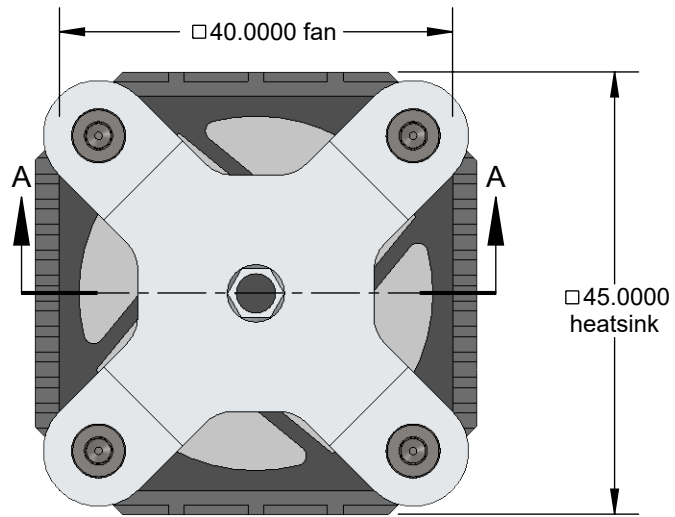
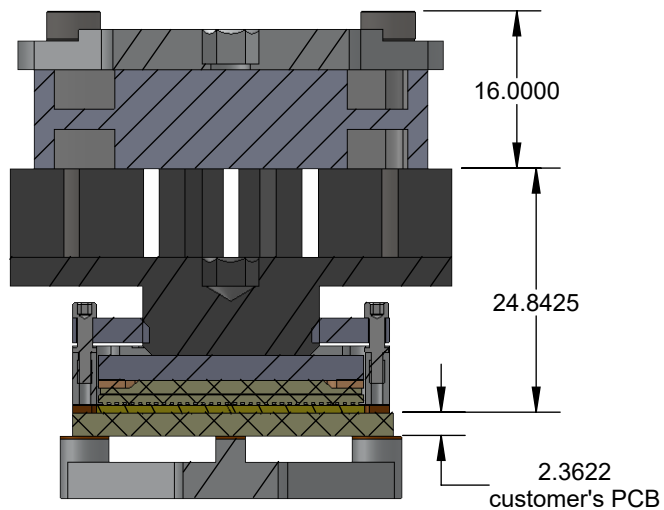


SG-BGA DIRECT MOUNT, SOLDERLESS SOCKET



TOP VIEW



SECTION A-A

Features

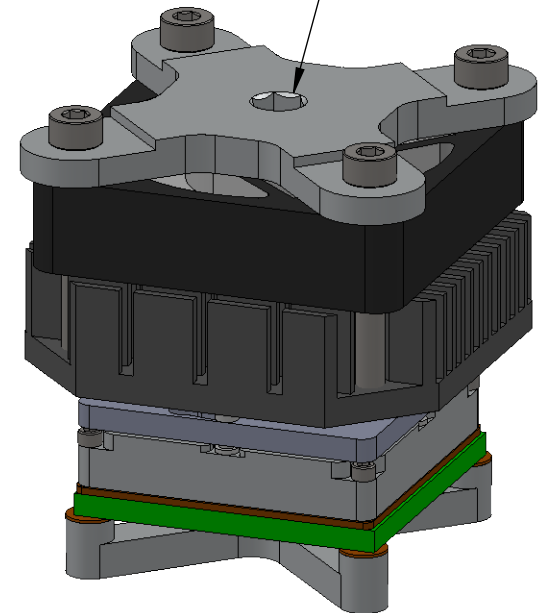
- Directly mounts to target PCB (needs tooling holes) with hardware.
- High speed reliable elastomer connection.
- Minimum real estate required.
- Compression plate distributes forces evenly.
- Easily removable swivel lid.

Required torque is

135.6 Ncm (12 lbf-in) for BGA1089

124 Ncm (11 lbf-in) for BGA1000


Recommended Tool: TL-Torquedriver-02



Description: SG-BGA1089 Socket for 27x27mm 0.8mm pitch 33x33mm IC

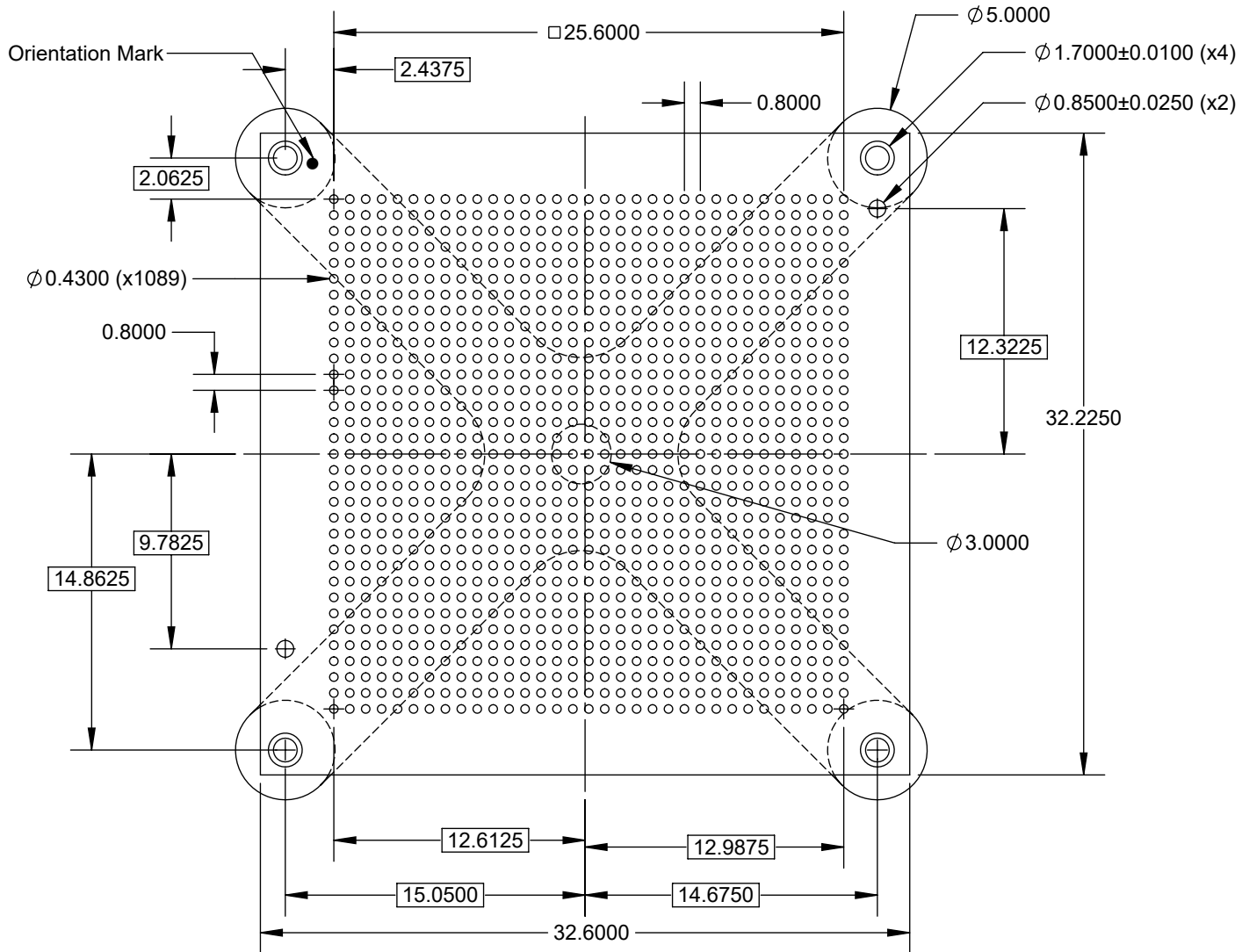
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

 SG-BGA-6446 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 93.69	STATUS: Released ENG: E. Smolentseva FILE: SG-BGA-6446 Dwg	SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 08/09/2016	REV. A SCALE: 1.3:1

Recommended PCB Layout
Top View

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



Target PCB Recommendations

Total thickness: 3.175 mm min.

Plating: Gold or Solder finish.


PCB Pad height: Same or higher than solder mask.

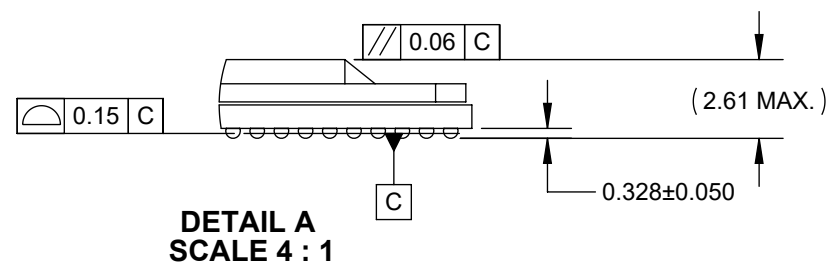
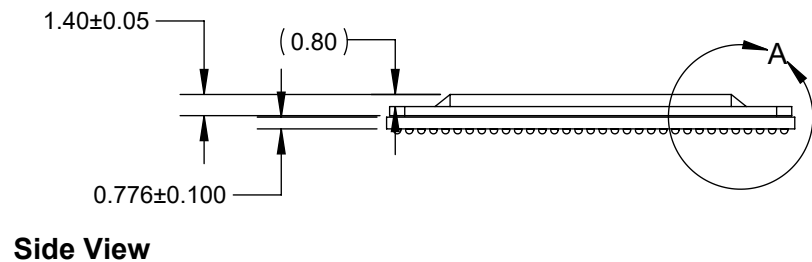
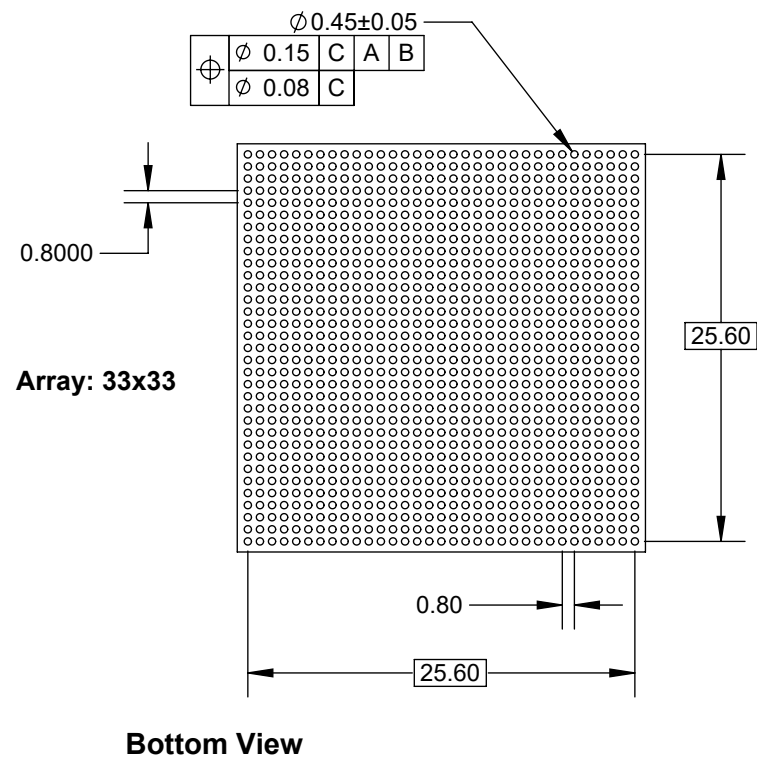
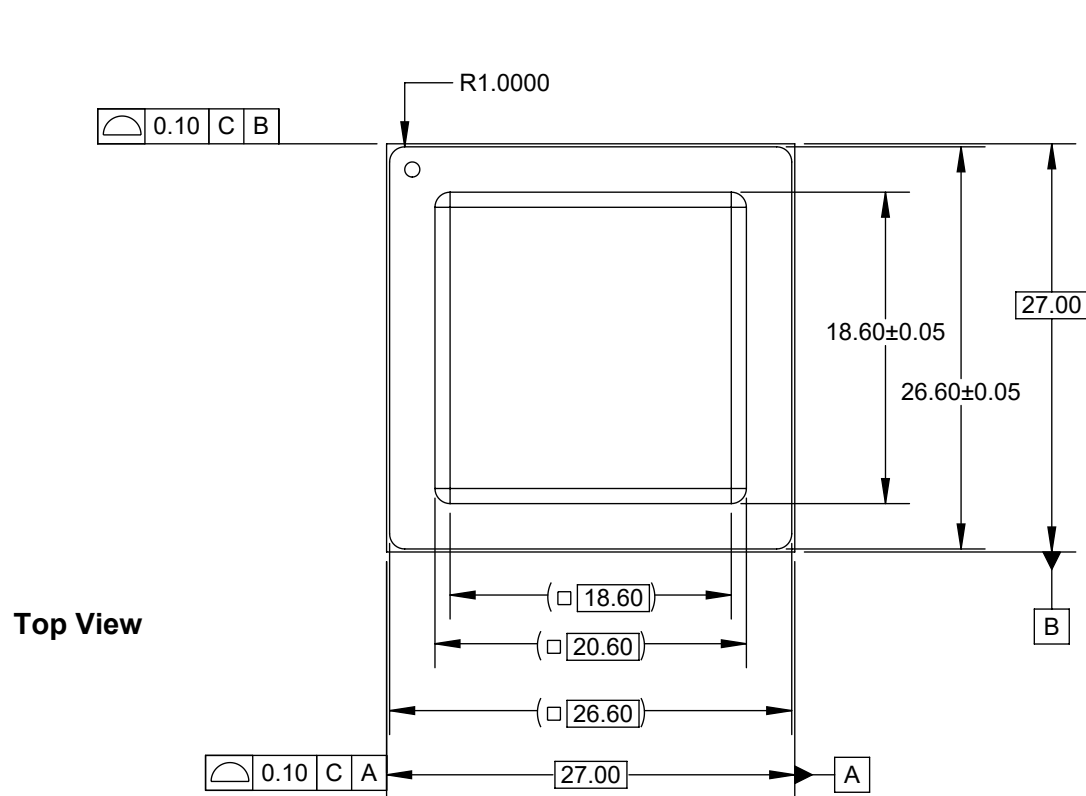
NOTE: Backing plate is required for thinner PCBs.

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.

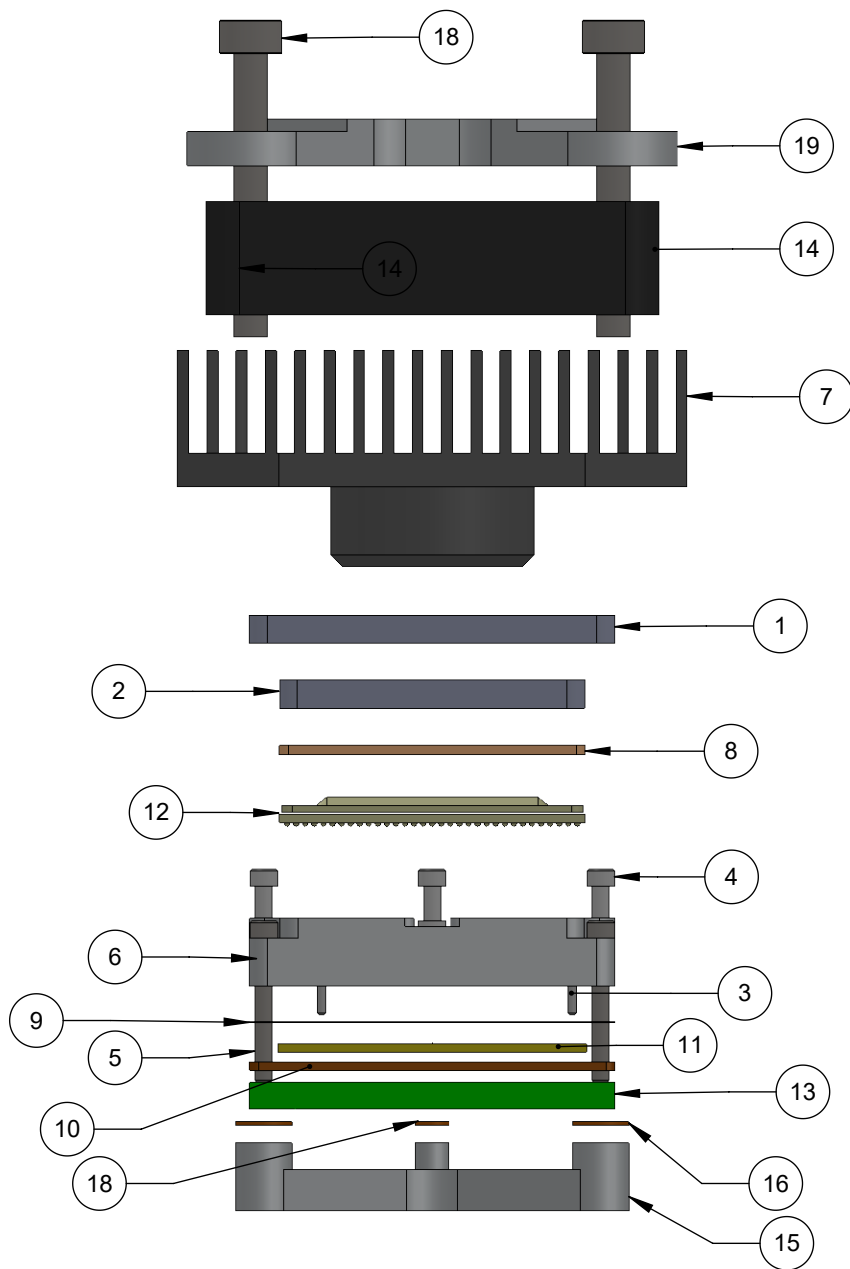
 SG-BGA-6446 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 93.69	STATUS: Released ENG: E. Smolentseva FILE: SG-BGA-6446 Dwg	SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 08/09/2016	REV. A SCALE: 3:1



Description: Compatible BGA Spec

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.

 SG-BGA-6446 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 93.69	STATUS: Released ENG: E. Smolentseva FILE: SG-BGA-6446 Dwg	SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 08/09/2016	REV. A SCALE: 2:1




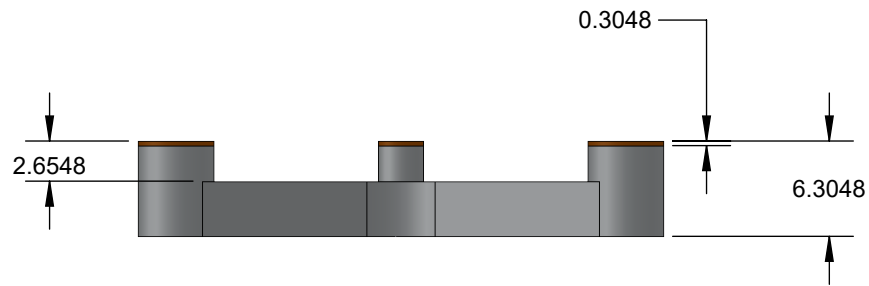
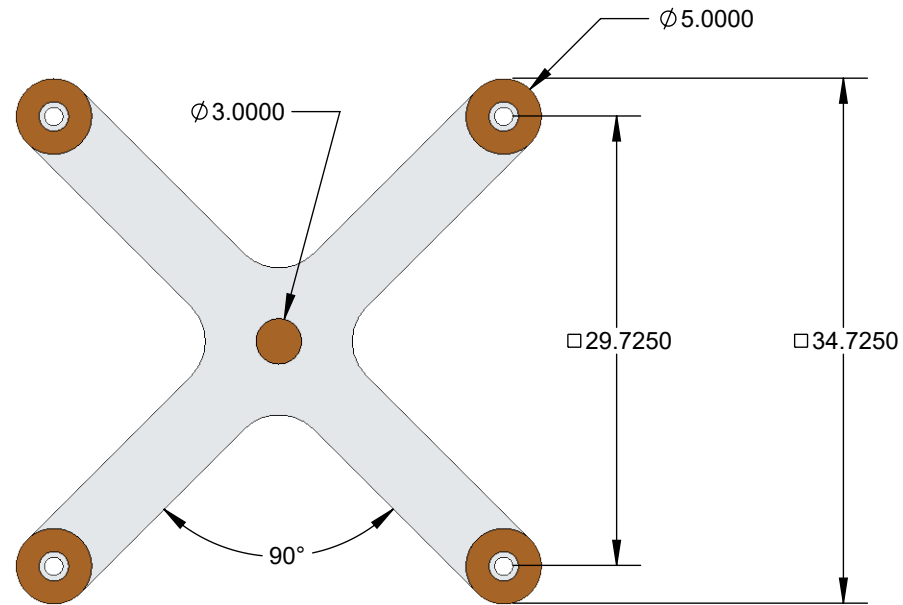
ITEM NO.	DESCRIPTION	Material
1	Socket Lid, 32.225 X 32.225	7075-T6 Aluminum Alloy
2	Compression Plate, 26.95 X 26.95	7075-T6 Aluminum Alloy
3	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
4	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
5	#0-80 x 0.5, SH Cap Screw	Alloy Steel
6	Socket Base	7075-T6 Aluminum Alloy
7	Compression Screw	7075-T6 Aluminum Alloy
8	IC frame	Ultem 1000
9	Ball Guide 27x27mm, 0.8mm, 33x33 array	Kapton Polyimide/Cirlex
10	Elastomer Guide 27mm IC	Kapton Polyimide/Cirlex/Ultem
11	0.75mm thick 0.1mm pitch 63 deg angled elastomer - 27.225mm square	SG Elastomer
12	Customer's device	FR4 Standard
13	Customer's PCB	FR4 Standard
14	Fan 40X10MM 12VDC 1.6W 9.9CFM	Material <not specified>
15	Backing Plate 27mm IC 5 post	7075-T6 Aluminum Alloy
16	Insulating washer, 5mm OD.	Kapton Polyimide/Cirlex
18	Insulating washer, 3mm OD.	Kapton Polyimide/Cirlex
18	Screw, M3 x 0.5mm, 25mm lg, Low Head Cap, SS	Stainless Steel (18-8)
19	Torquing bracket, 32mm hole centers, 5mm hex	7075-T6 Alumium Alloy

Description: Socket Assem and Detail

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.


 SG-BGA-6446 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 93.69	STATUS: Released	SHEET: 4 OF 5	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1.5:1
		FILE: SG-BGA-6446 Dwg	DATE: 08/09/2016	



Description: Backing plate

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

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

 SG-BGA-6446 Drawing ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 93.69	STATUS: Released	SHEET: 5 OF 5	REV. A
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: SG-BGA-6446 Dwg	DATE: 08/09/2016	