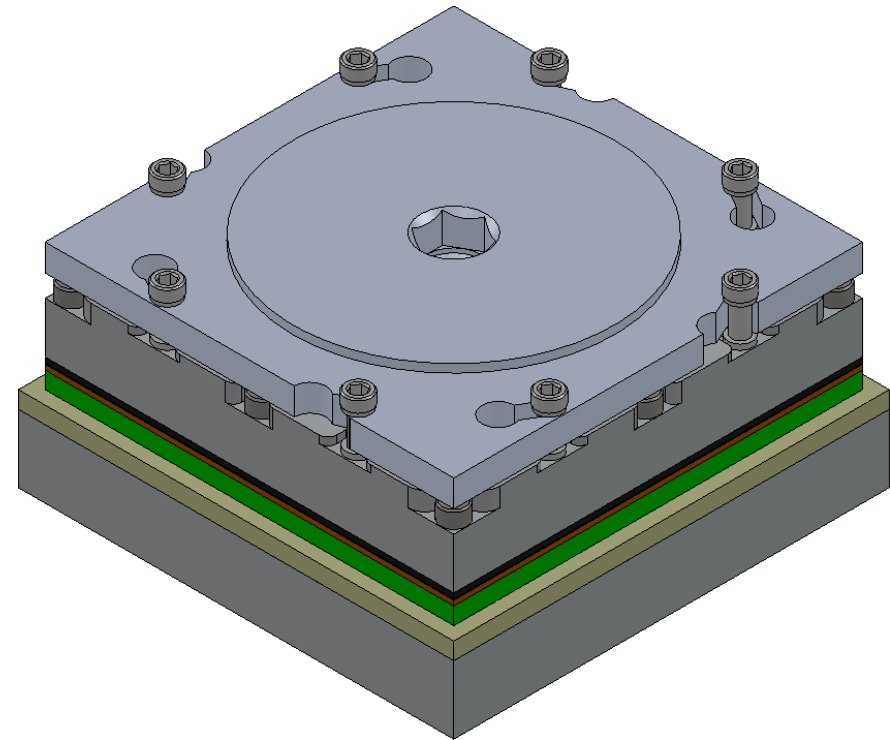
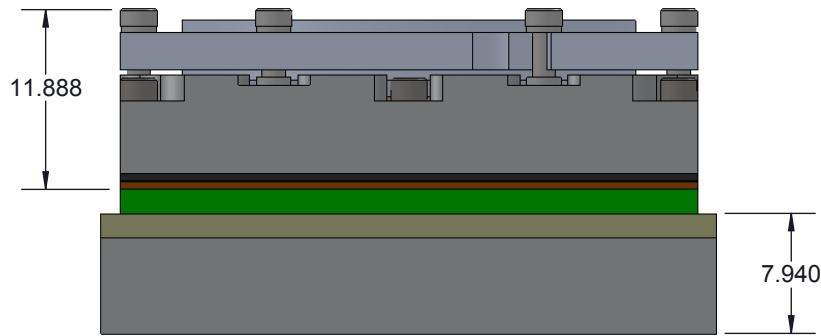
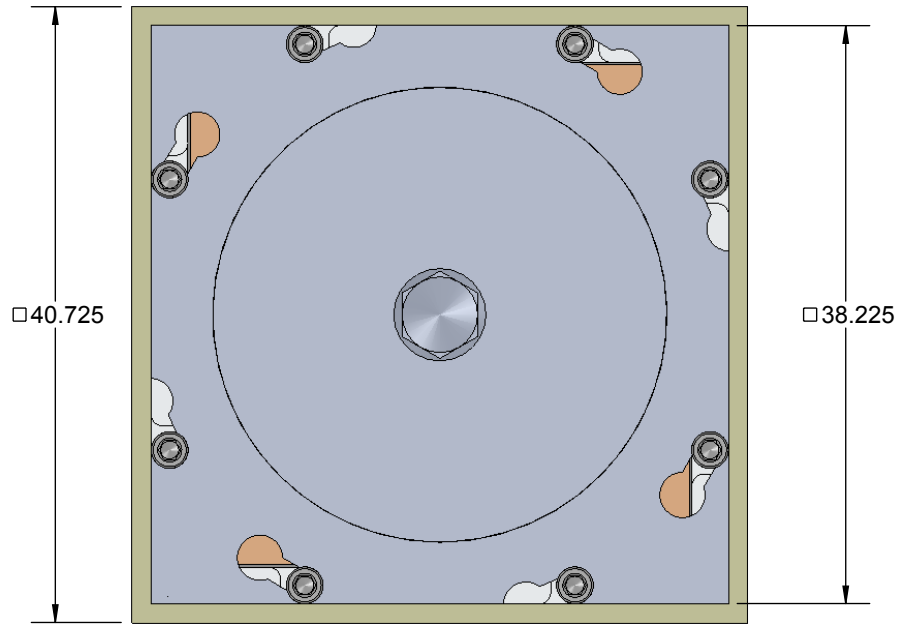


# GHz QFE Socket - Direct mount, solderless

## 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
- Lead guide prevents over compression of elastomer
- Easily removable swivel socket lid

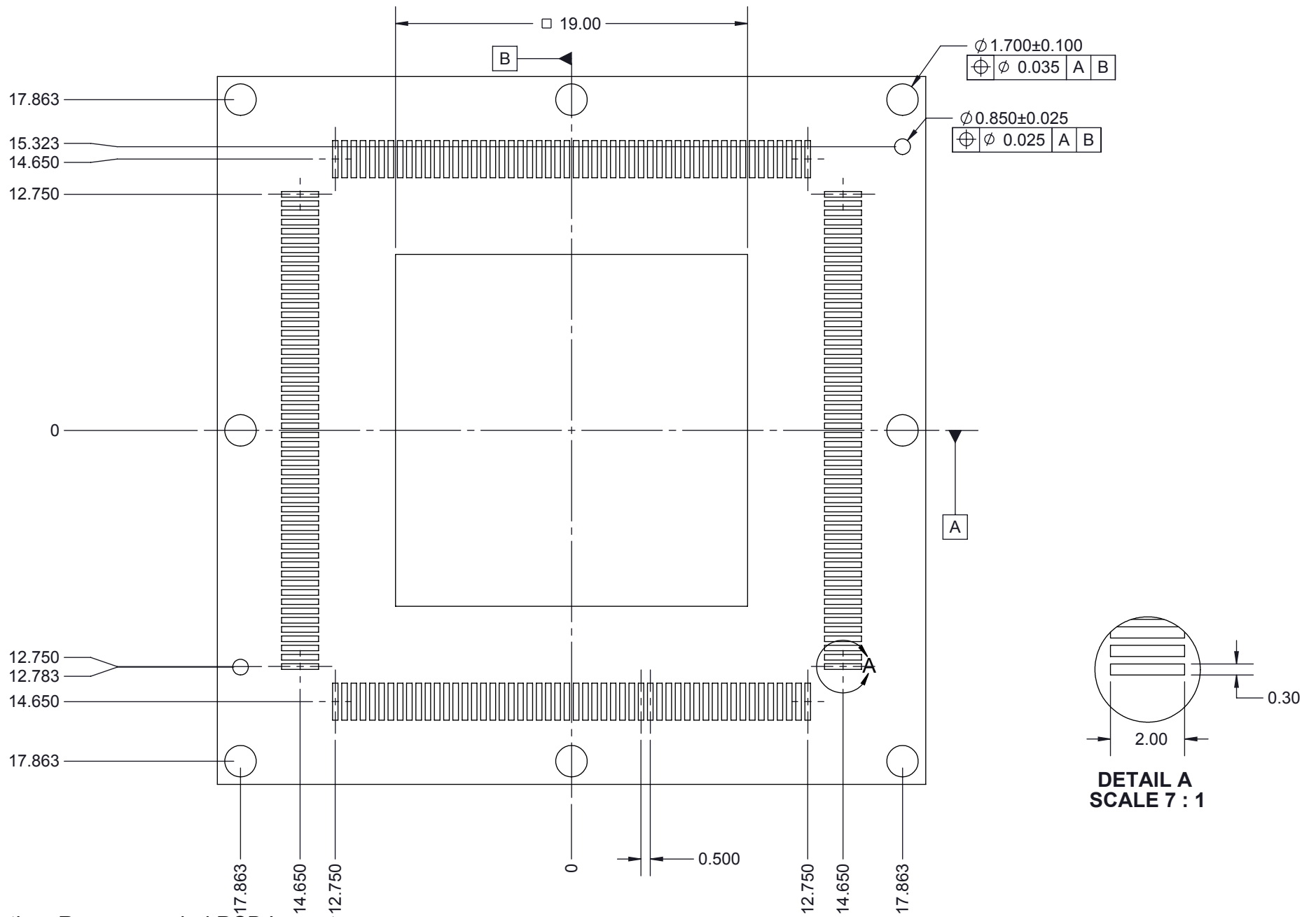


## Description: SG-QFE208 Socket

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.


 <b>SG-QFE-7013 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 64.82	STATUS: Released	SHEET: 1 OF 4	REV. B
		ENG: B. Fedde	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: SG-QFE-7013 Dwg	DATE: 06/21/2013	

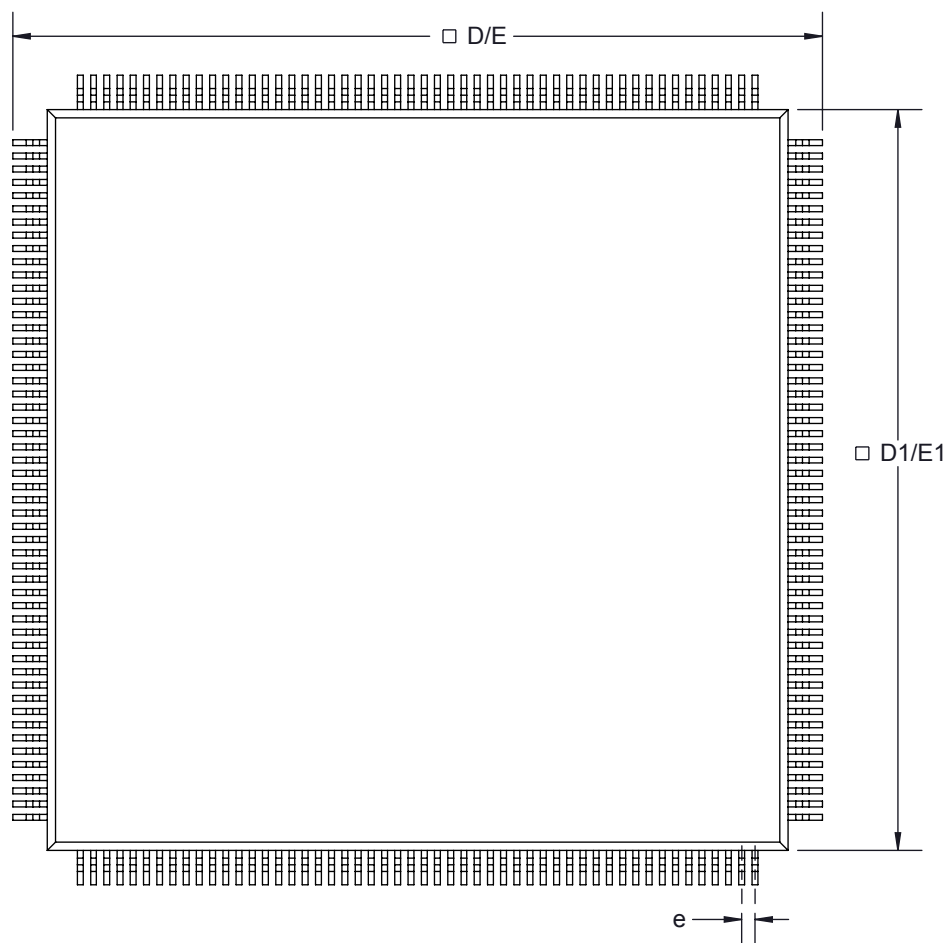


### Description: Recommended PCB Layout

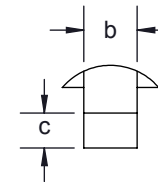
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**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.

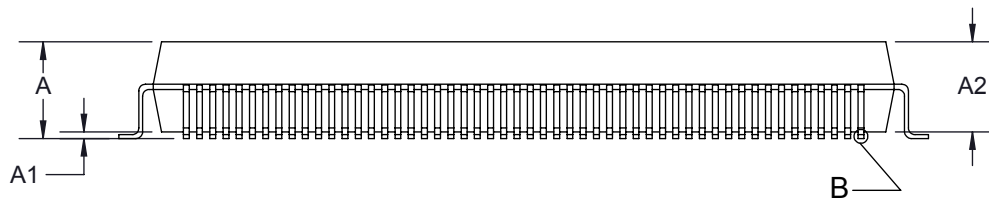
 <b>SG-QFE-7013 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 64.82	STATUS: Released ENG: B. Fedde FILE: SG-QFE-7013 Dwg	SHEET: 2 OF 4 DRAWN BY: M. Raske DATE: 06/21/2013	REV. B SCALE: 3.5:1



**Ironwood Package Code : QFE208SBx**  
 Please confirm compatibility with Ironwood engineering prior to ordering



**DETAIL B**  
**SCALE 32 : 1**



Dimensions are in millimeters.


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

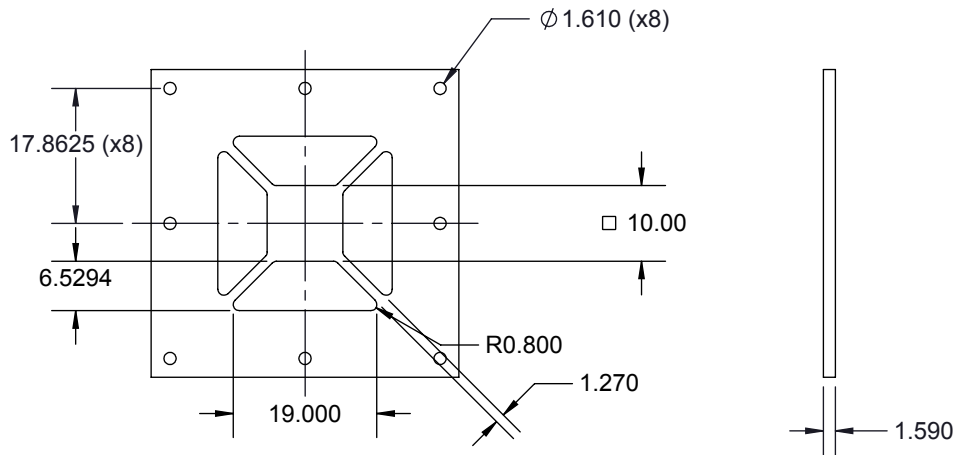
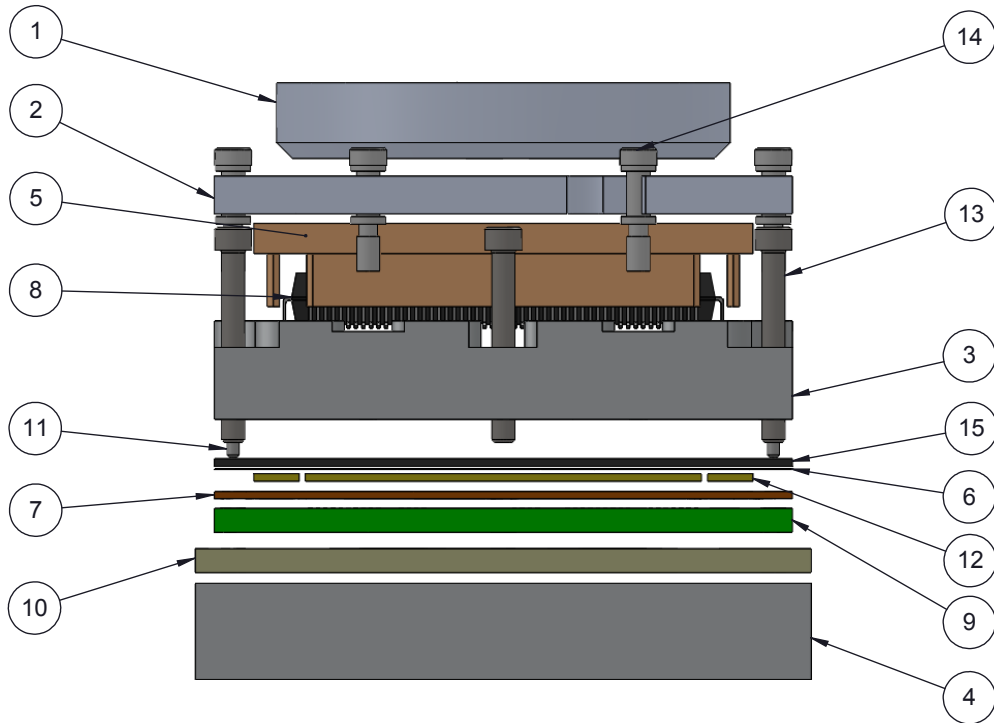
DIM	MIN	MAX
A		4.07
A1	0.15	0.35
A2	3.2	3.6
b	0.17	.27
c	0.08	0.2
D	30.6	
D1	28	
E	30.6	
E1	28	
e	0.5	

### Description: Compatible Device

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.

 <b>SG-QFE-7013 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 64.82	STATUS: Released ENG: B. Fedde FILE: SG-QFE-7013 Dwg	SHEET: 3 OF 4 DRAWN BY: M. Raske DATE: 06/21/2013	REV. B SCALE: 3.5:1




ITEM NO.	DESCRIPTION	Material
1	Compression Screw, M30	7075-T6 Aluminum Alloy
2	Socket Lid 33mm GHz swivel	7075-T6 Aluminum Alloy
3	GHz Socket Base 33x33mm IC 6.5m thick	7075-T6 Aluminum Alloy
4	Backing Plate	7075-T6 Aluminum Alloy
5	Compression Plate QFE 208 26x3.505 extrusion	Ultem 1000
6	QFE 208 Lead Guide	Kapton Polyimide/Cirlex
7	Elastomer Guide QFE 208	Kapton Polyimide/Cirlex
8	QFP 208 Test Chip	Material <not specified>
9	QFE 208 Test PCB	FR4 High temp
10	Insulating Plate 33mm IC	High Temp FR4
11	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
12	0.5mm thick, 0.05x 0.05mm pitch, 50mm sqr, Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symmetrically in a silicon rubber (63.5 degree angle), Thickness: 0.5mm
13	#0-80 x 0.5, SH Cap Screw	Alloy Steel
14	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
15	QFE 208 IC Guide	Cirlex

Rev	Date	Initials	Description
A	06/21/13	MR	Original
B	07/23/14	DH	Changed IC guide material to Cirlex

## Description: Socket, Backing Plate 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.

 <b>SG-QFE-7013 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 64.82	STATUS: Released	SHEET: 4 OF 4	REV. B
		ENG: B. Fedde	DRAWN BY: M. Raske	SCALE: 2:1
		FILE: SG-QFE-7013 Dwg	DATE: 06/21/2013	