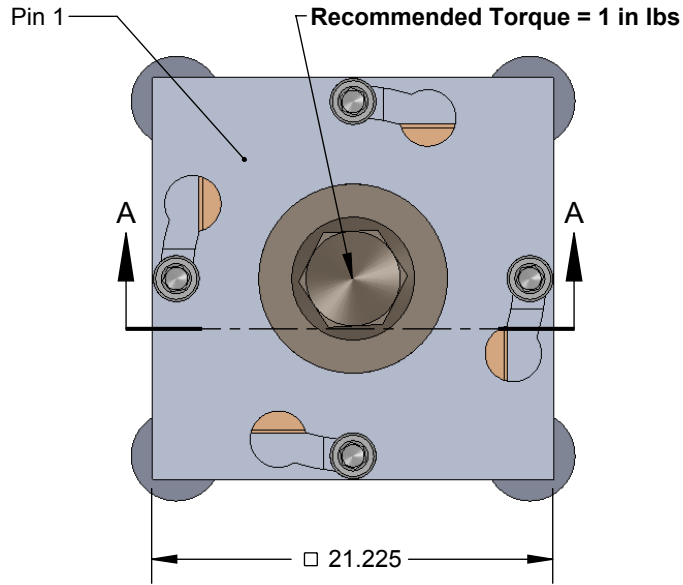


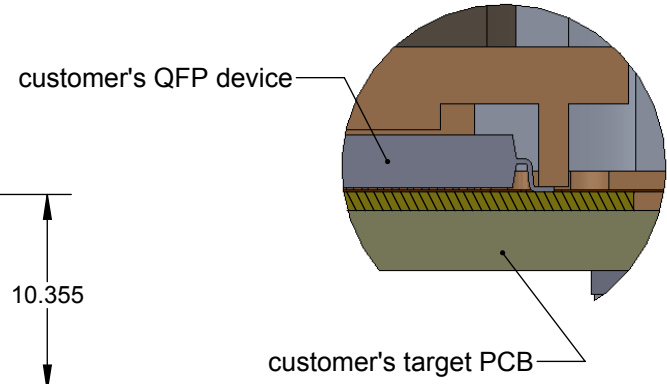
# GHz QFP Socket - Direct mount, solderless



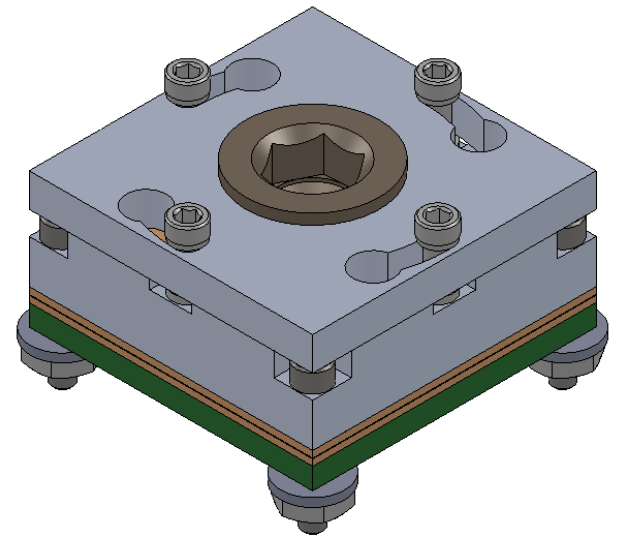
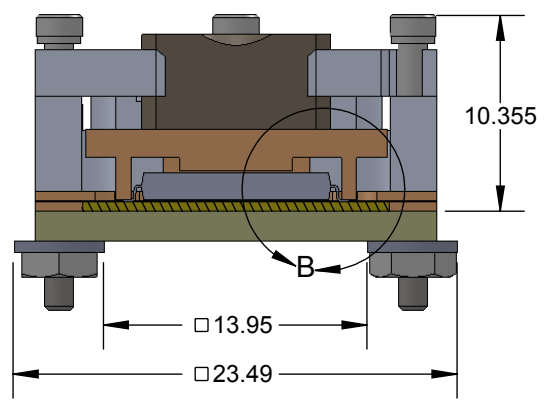
## Features

- 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 socket lid

## DETAIL B SCALE 5 : 1




## TOP VIEW



## SECTION A-A

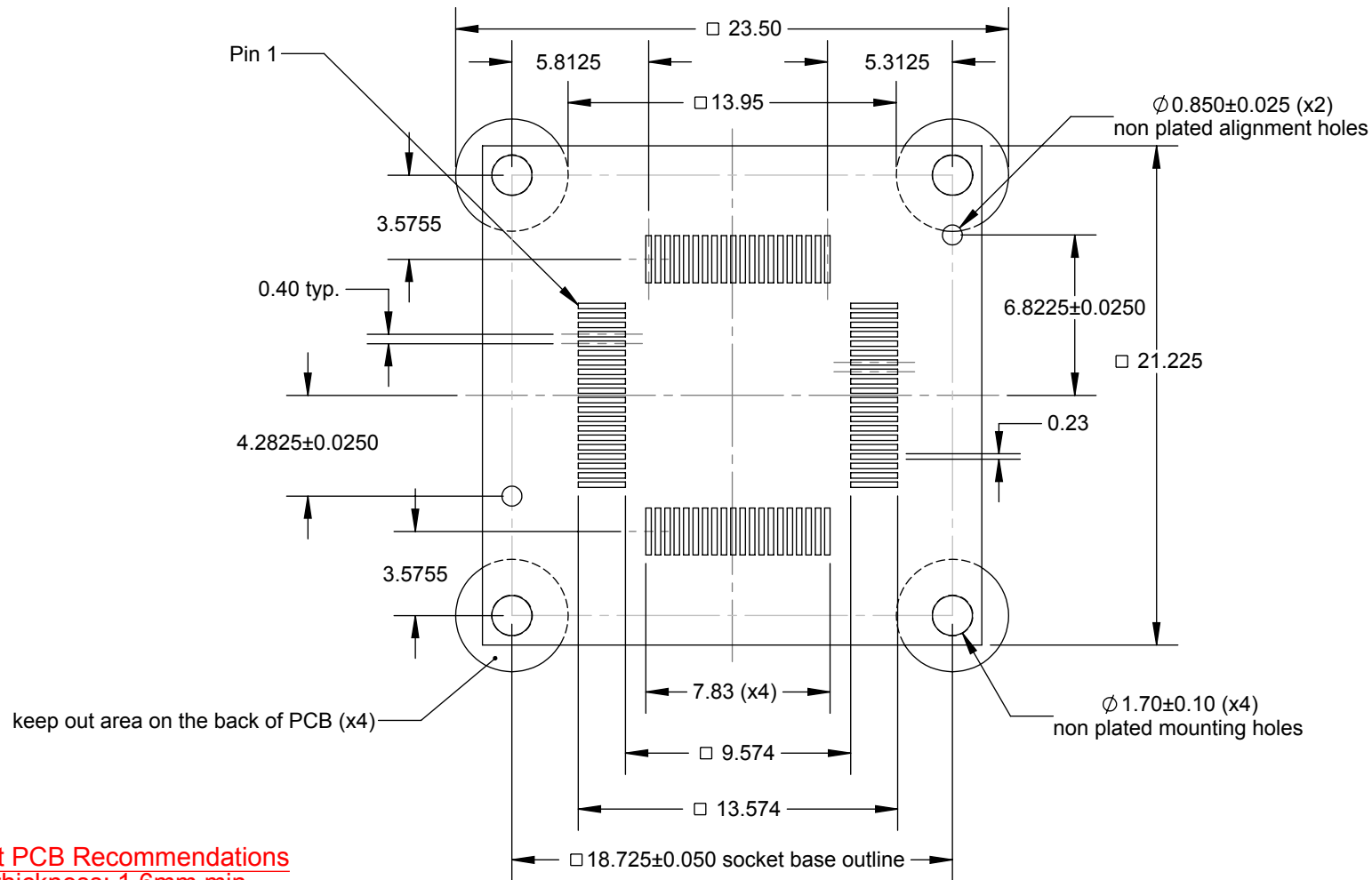
### Description: Socket specification

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-QFE-7012 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 9.24	STATUS: Released	SHEET: 1 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 5:2
		FILE: SG-QFE-7012	DATE: 4/25/13	

**\*Note: QFP pattern is not symmetrical with respect to the mounting holes. It is shifted to the right by 0.25mm**

Recommended PCB Layout  
Top View



Target PCB Recommendations

Total thickness: 1.6mm min.

Plating: Gold or Solder finish.


PCB Pad height: Same or higher than solder mask.

**NOTE: Steel backing plate may be required based on end user's application.**

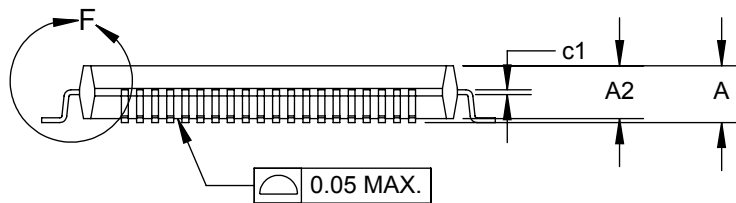
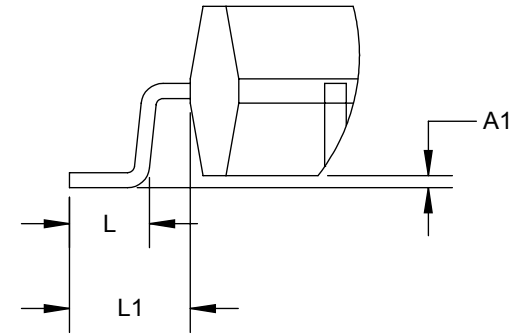
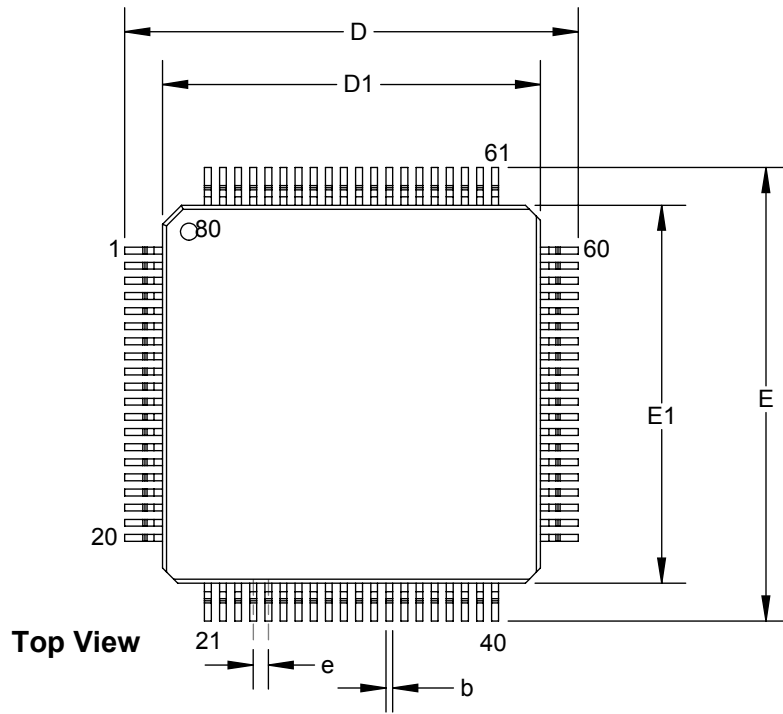
Description: Rcommended PCB Layout

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.

 <p><b>SG-QFE-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 9.24</p>	STATUS: Released	SHEET: 2 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 3.5:1
		FILE: SG-QFE-7012	DATE: 4/25/13	


Ironwood Package code QFE80SG

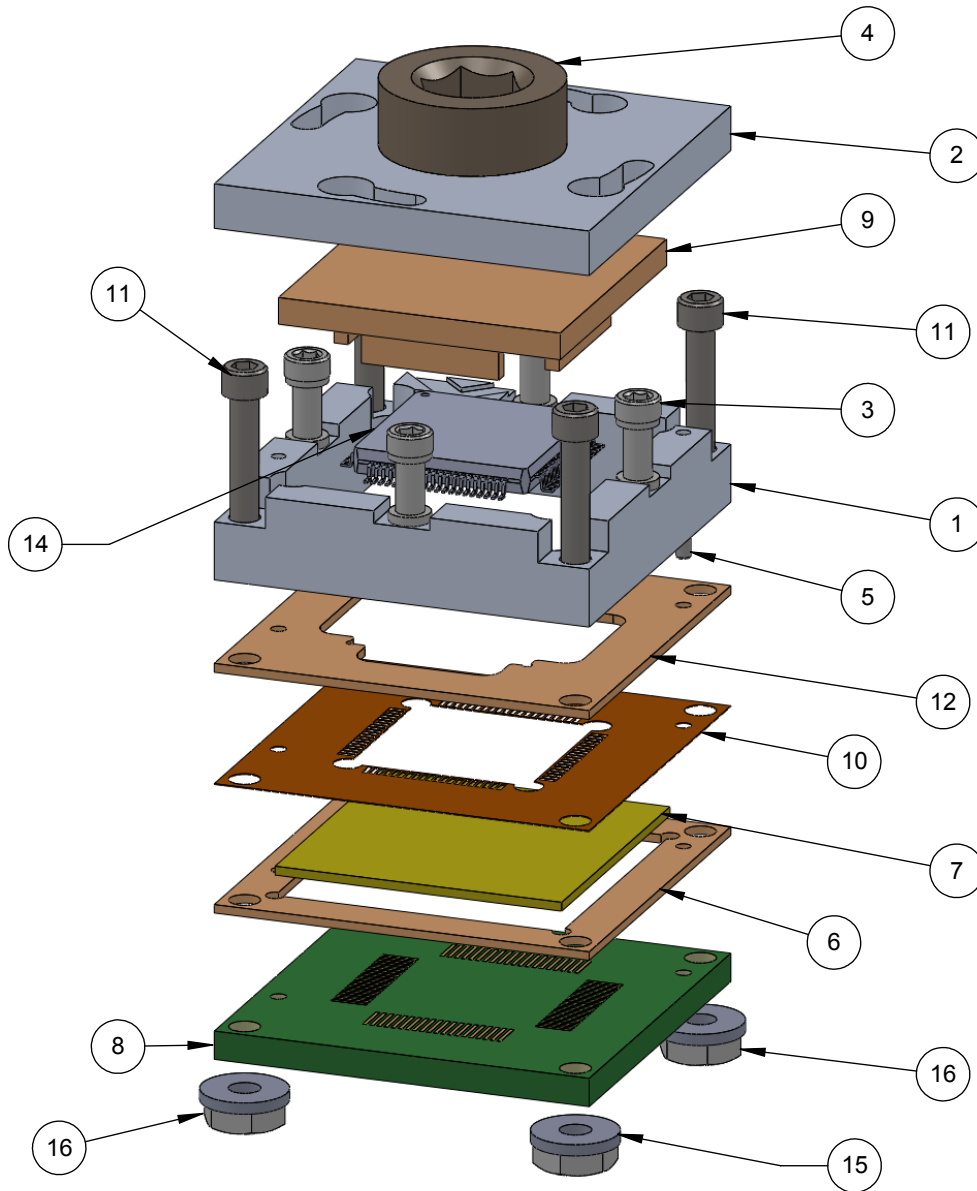


DIM	MIN	MAX
A		1.6
A1	0.05	0.15
A2	1.35	1.45
c1	0.09	0.16
b	0.13	0.23
D	12 BSC	
D1	10 BSC	
E	12 BSC	
E1	10 BSC	
e	0.4 BSC	
L	0.45	0.75
L1	1 REF	

**Description: Compatible QFP 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-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 9.24	STATUS: Released	SHEET: 3 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 5:1
		FILE: SG-QFE-7012	DATE: 4/25/13	




Insulation Plate Top View

ITEM NO.	DESCRIPTION	Material
1	Socket Base	7075-T6 Aluminum Alloy
2	Socket Lid	7075-T6 Aluminum Alloy
3	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
4	Compression Screw M10	7075-T6 Alumium Alloy
5	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
6	Elastomer Guide	Ultem 1000
7	0.5mm thick, 0.05x 0.05mm pitch, 50mm sqr, Z-axis conductive angled elastomer	20 Micron dia gold plated brass filaments arranged symetrically in a silicon rubber (63.5 degree angle), Thickness: 0.5mm
8	Customer's target PCB for LQFP80	FR4 Standard
9	Compression Plate QFE 12x12mm T-T Ultem	Ultem 1000
10	Lead Guide for 12x12mm tip to tip, 10x10mm body, 0.4mm pitch LQFP80	Kapton Polyimide
11	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
12	IC Guide QFE 12x12mm T-T	Ultem 1000
15	Washer, #0 x .025", Nylon	Nylon 6/6
14	LQFP80 12mm tip to tip, 10mm body, 0.4mm pitch	Material <not specified>
16	Nut, #0-80, SS	Stainless Steel (18-8)

## Description: Socket Assembly

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-7012 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 9.24	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 2.5:1
		FILE: SG-QFE-7012	DATE: 4/25/13	