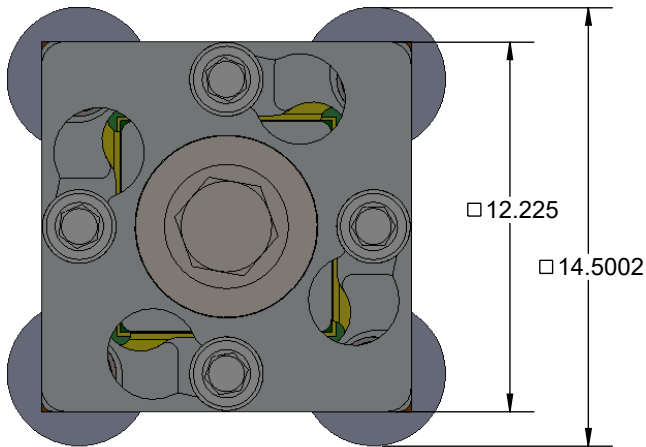


# GHz BGA Socket - Direct mount, solderless

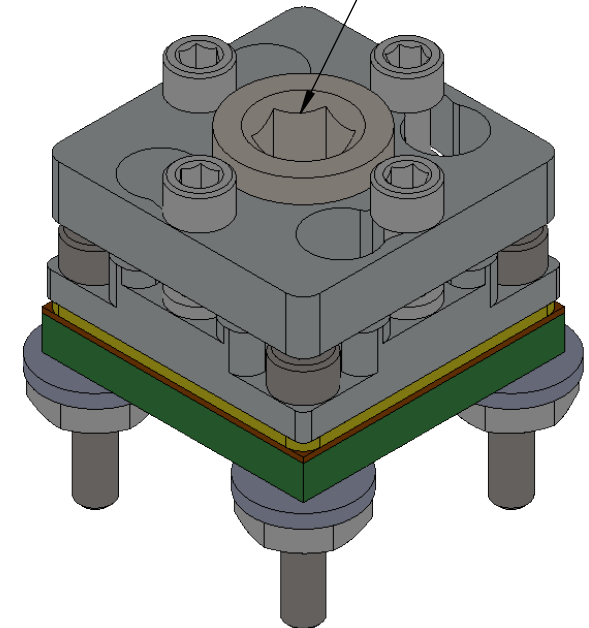
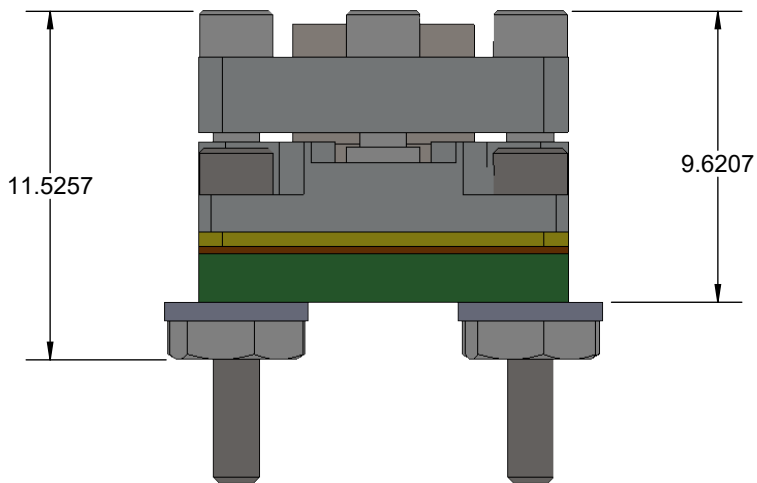
## Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



REQUIRED TORQUE: 14.13 Ncm (1.25 lbf in)


RECOMMENDED TOOL: TL-TORQUEDRIVER-09



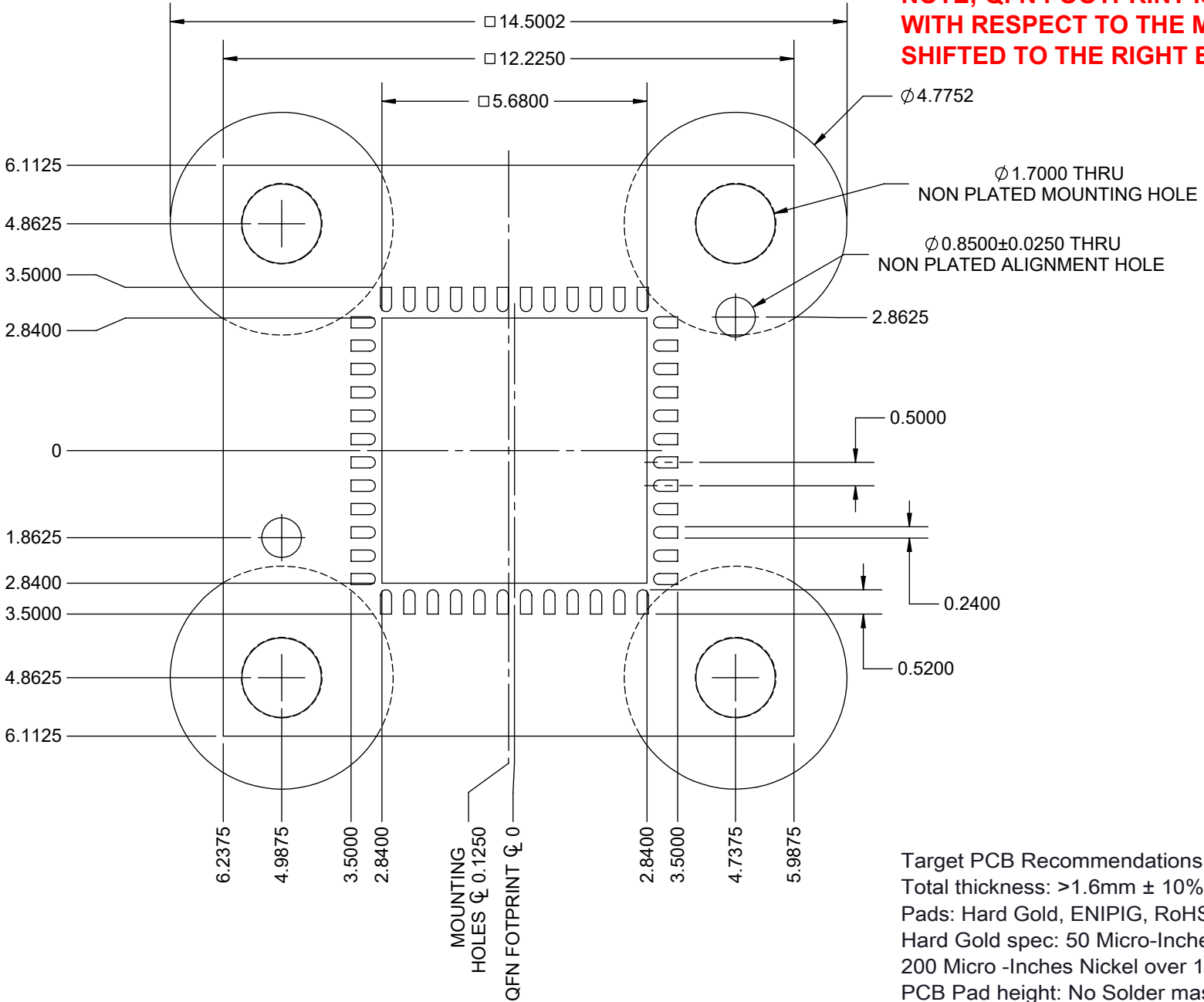
## Description: GHz Socket for 7x7mm QFN

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.

 <p>©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p><b>SG25-QFN-2005 Drawing</b></p>	<p>Material: N/A Finish: N/A Weight: 4.24</p>	<p>STATUS: Released ENG: E. Smolentseva FILE: SG25-QFN-2005</p>	<p>SHEET: 1 OF 4 DRAWN BY: E. Smolentseva DATE: 5/2/17</p>	<p>REV. B SCALE: 4:1</p>


**NOTE; QFN FOOTPRINT IS NOT SYMMETRICAL WITH RESPECT TO THE MOUNTING HOLES. IT IS SHIFTED TO THE RIGHT BY 0.125MM**



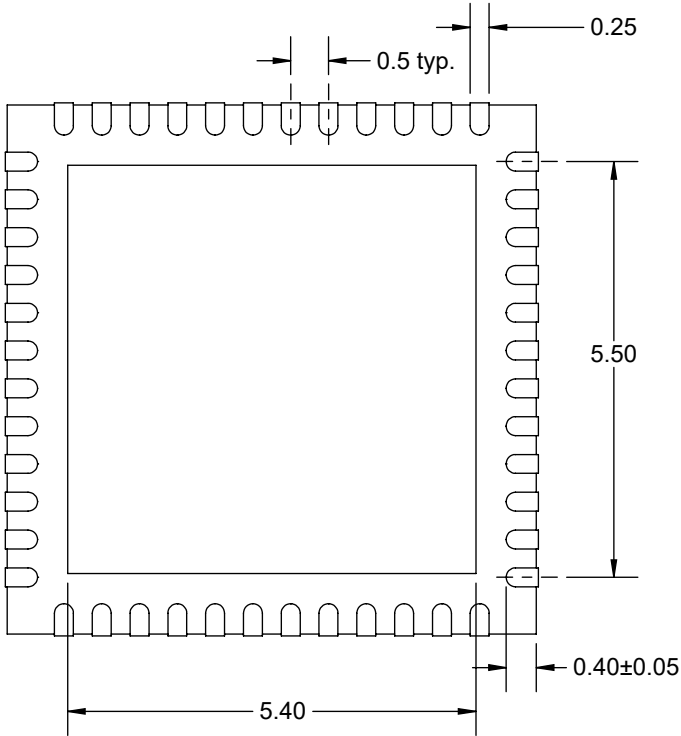
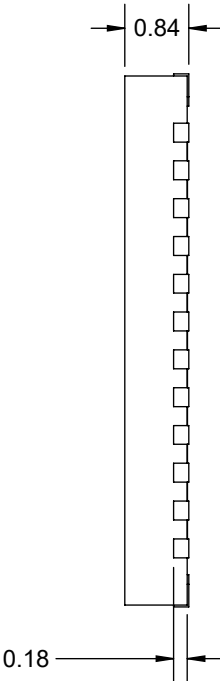
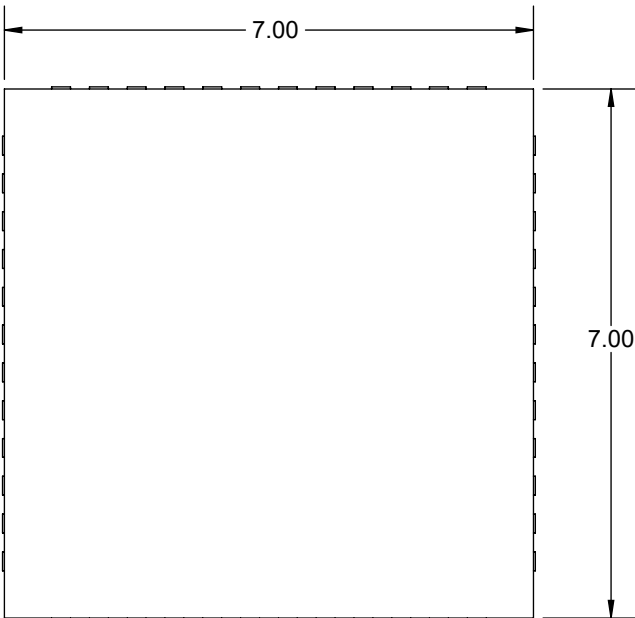
**Target PCB Recommendations**  
 Total thickness: >1.6mm ± 10%  
 Pads: Hard Gold, ENIPIG, RoHS HASL  
 Hard Gold spec: 50 Micro-Inches Gold over  
 200 Micro -Inches Nickel over 1/2-1 Oz copper  
 PCB Pad height: No Solder mask or 0.001" mask  
 thickness is acceptable.  
 Copper defined solder mask and SMOBC is recommended

**Description: Recommended PCB Layout**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.  
 Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.


 ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	SG25-QFN-2005 Drawing	Material: N/A Finish: N/A Weight: 4.24	STATUS: Released	SHEET: 2 OF 4	REV. B
			ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 8:1
			FILE: SG25-QFN-2005	DATE: 5/2/17	

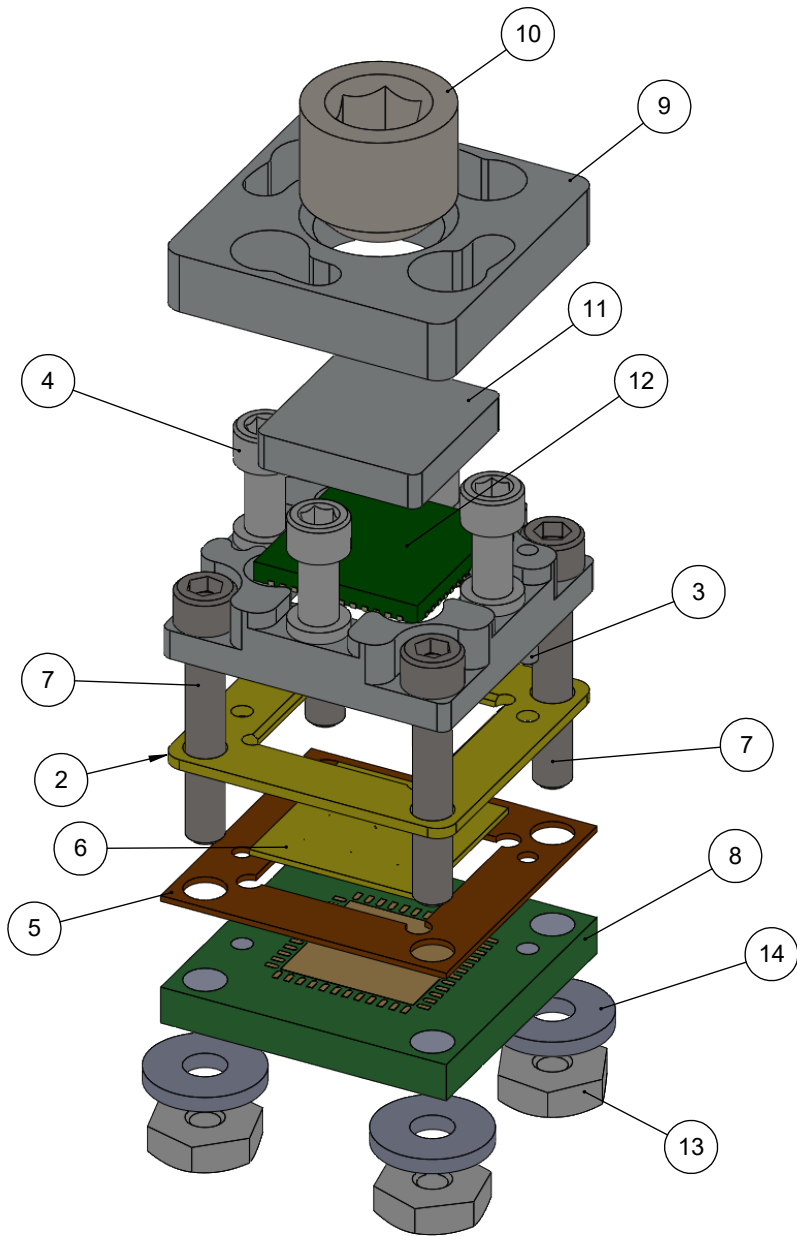
IRONWOOD PACKAGE CODE QFN48A



**Description: Compatible Device**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.  
 Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

 ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	<b>SG25-QFN-2005 Drawing</b>	Material: N/A Finish: N/A Weight: 4.24	STATUS: Released	SHEET: 3 OF 4	REV. B
			ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 10:1
			FILE: SG25-QFN-2005	DATE: 5/2/17	




ITEM NO.	DESCRIPTION	Material
1	Socket Base 7mm	7075-T6 (SN)
2	IC guide 7x7mm	Torlon 4203
3	Alignment Pin 1/32" dia. x 1/8" lng	Chrome Stainless Steel
4	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
5	Elastomer Guide for 7mm IC 0.25mm	Kapton Polyimide/Cirlex
6	elastomer	SG Elastomer
7	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
8	Test PCB	Material <not specified>
9	Socket Lid 7mm	7075-T6 Aluminum Alloy
10	Compression Screw M6x1	Stainless Steel (18-8)
11	Compression Plate 7mm IC, 1.5mm thick	7075-T6 (SN)
12	Test Chip; 7x7mm 0.5mm pitch QFN48A	FR4 Standard
13	Nut, #0-80, SS	Stainless Steel (18-8)
14	Washer, #0 x .025", Nylon	Nylon 6/6

## 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>SG25-QFN-2005 Drawing</b> ©2017 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 4.24	STATUS: Released	SHEET: 4 OF 4	REV. B
		ENG: E. Smolentseva	DRAWN BY: E. Smolentseva	SCALE: 3.5:1
		FILE: SG25-QFN-2005	DATE: 5/2/17	