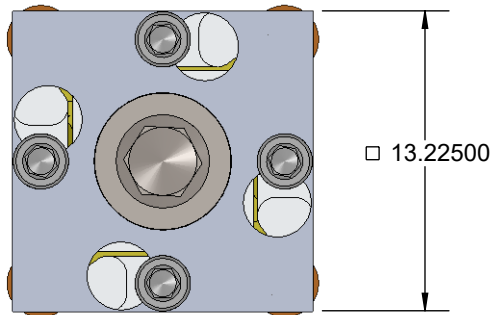


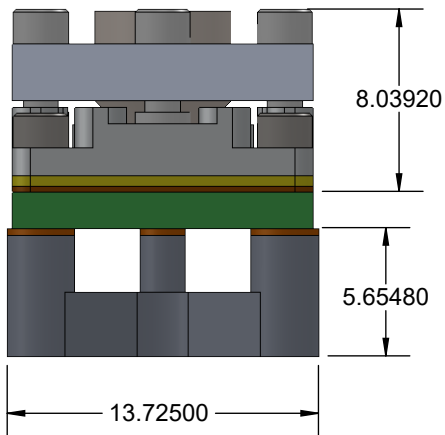
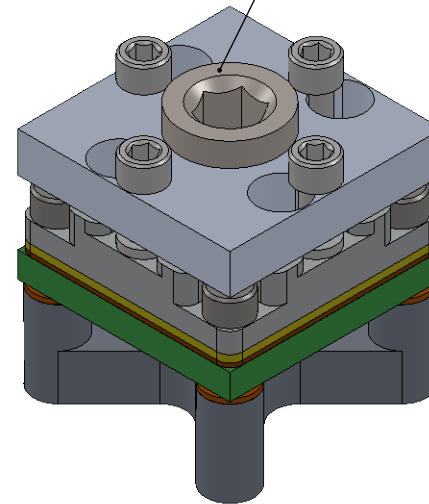
# GHz MLF Socket - Direct mount, solderless

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




Required torque = 0.375 lbf-in. (4.23 N-cm)  
 Recommended Tool: TL-Torquedriver-07



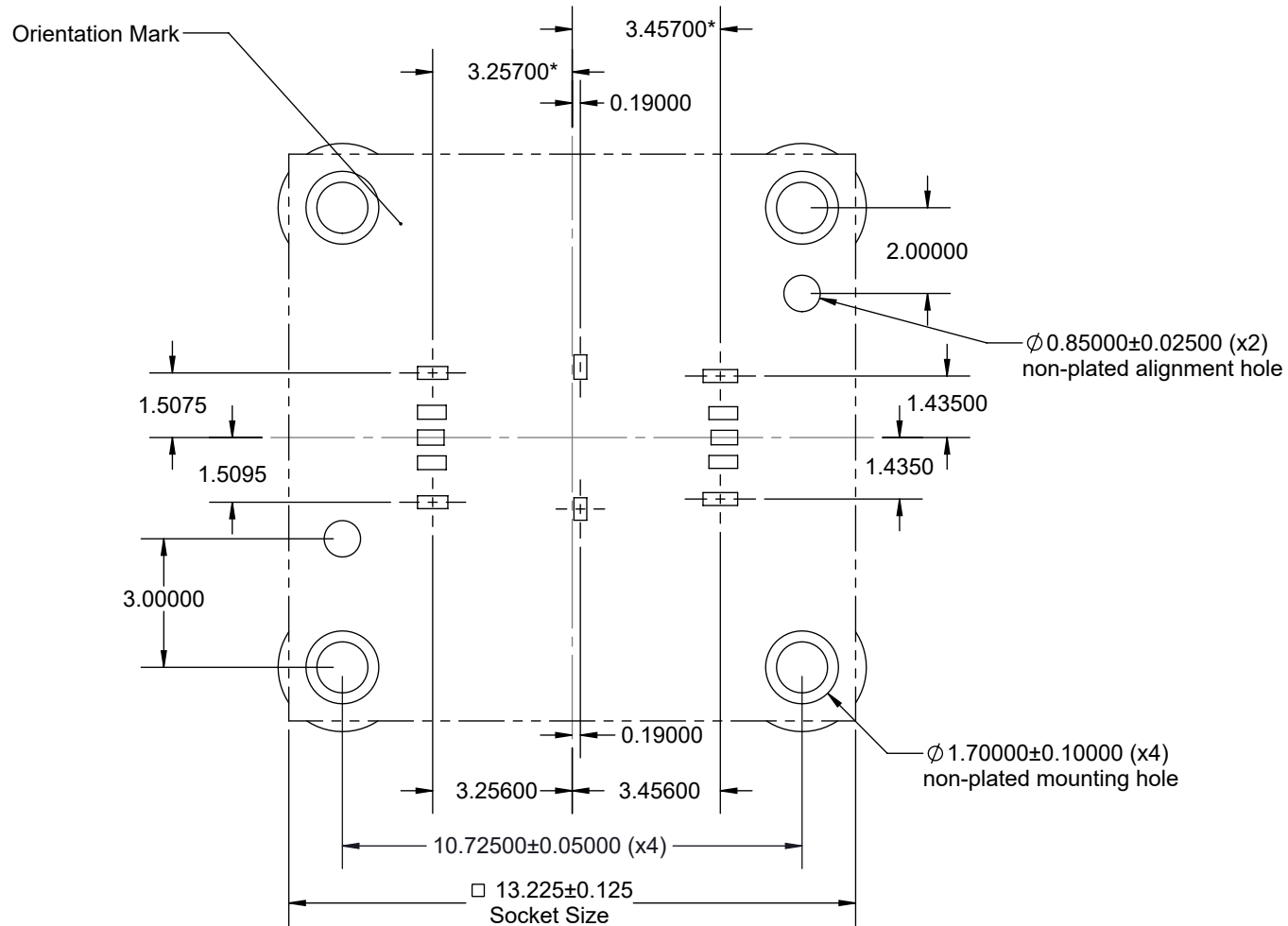
## Description: SG25-QFN for 7.87x4.26mm 0.5mm pitch min QFN12

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.

<b>SG25-QFN-2000 Drawing</b>		Material: N/A	STATUS: Released	SHEET: 1 OF 5	REV. A
 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Finish: N/A	Weight: 5.11	ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 3:1
			FILE: SG25-QFN-2000 Dwg	DATE: 08/13/2016	

**\*Note: QFN pattern is not symmetrical with respect to the mounting holes. It is offset 0.125mm to the right of center.**



### 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.


### Target PCB Recommendations

Total thickness: 1.6mm min.

Plating: Gold or Solder finish

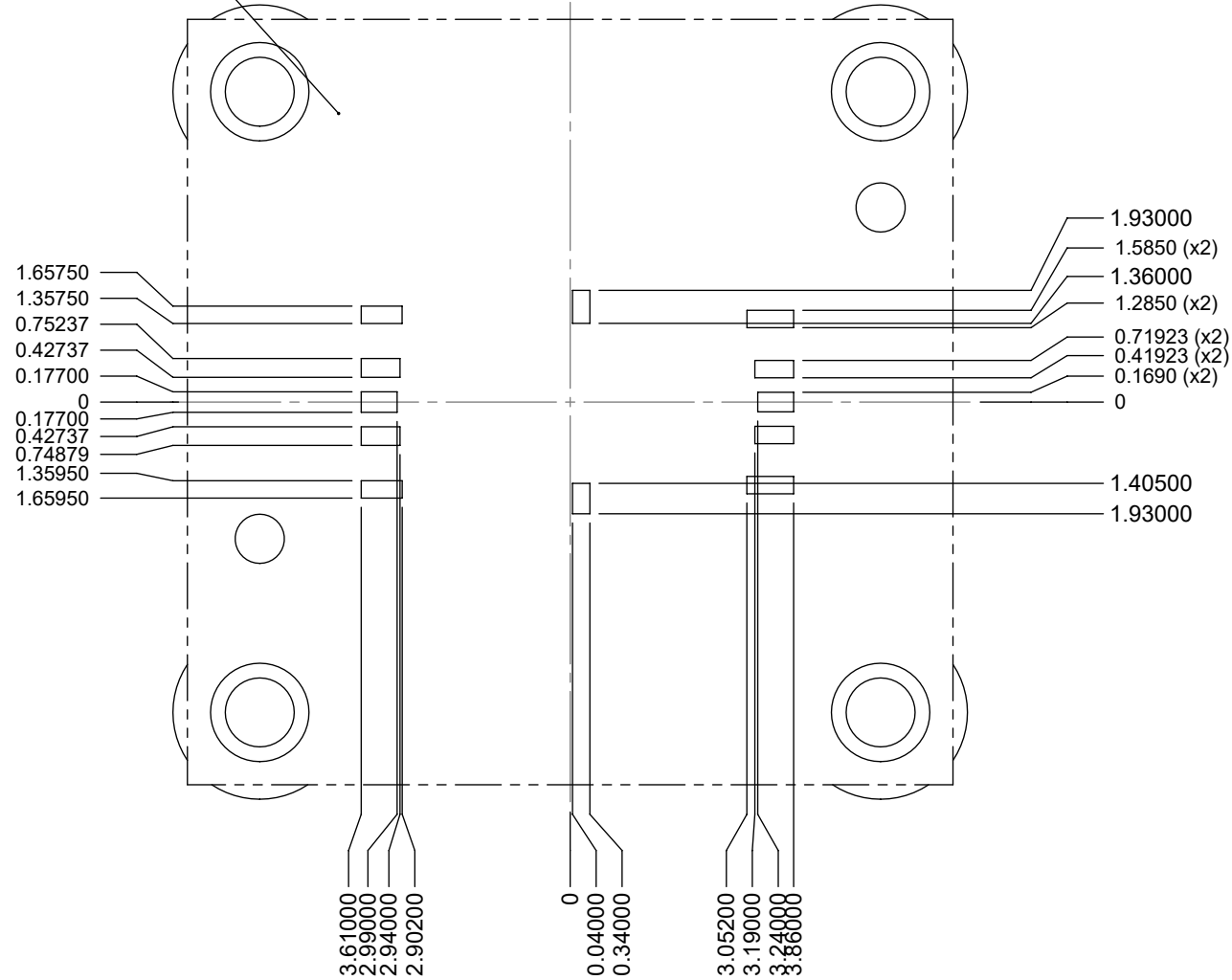
PCB Pad height: Same or higher than solder mask

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

 <p><b>SG25-QFN-2000 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p>	<p>Material: N/A Finish: N/A Weight: 5.11</p>	STATUS: Released	SHEET: 2 OF 5	REV. A
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 6:1
		FILE: SG25-QFN-2000 Dwg	DATE: 08/13/2016	

**\*Note: QFN pattern is not symmetrical with respect to the mounting holes. It is offset 0.125mm to the right of center.**

Orientation Mark



### Description: Recommended PCB Layout 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.


### Target PCB Recommendations

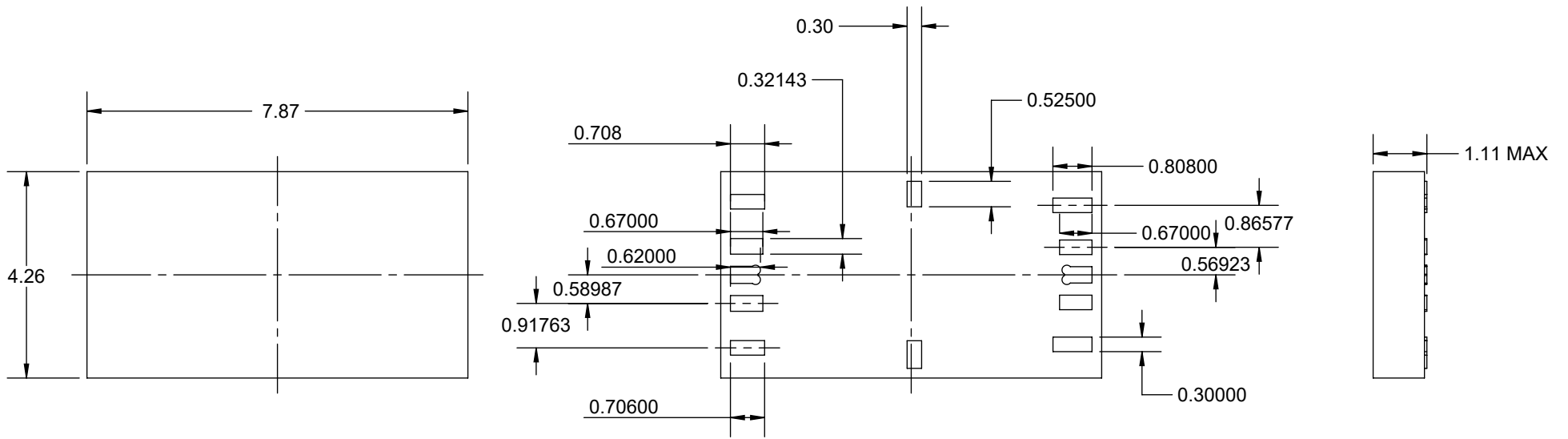
Total thickness: 1.6mm min.

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**

	<b>SG25-QFN-2000 Drawing</b>	Material: N/A Finish: N/A Weight: 5.11	STATUS: Released	SHEET: 3 OF 5	REV. A
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	ENG: S. Huang	DRAWN BY: M. Raske	DATE: 08/13/2016	SCALE: 8:1



TOP VIEW


BOTTOM VIEW

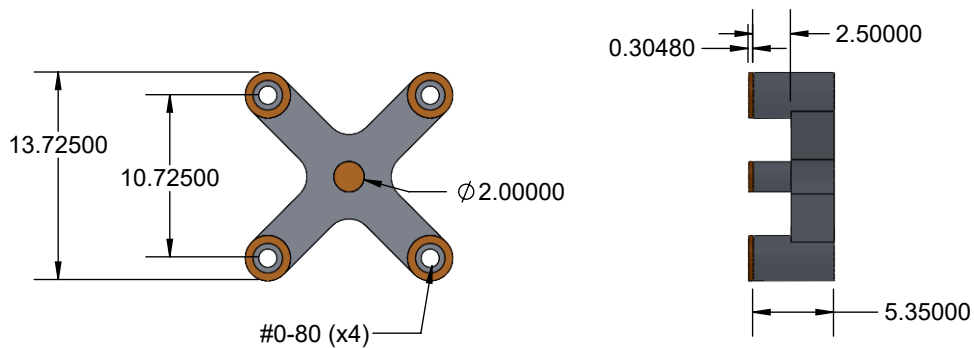
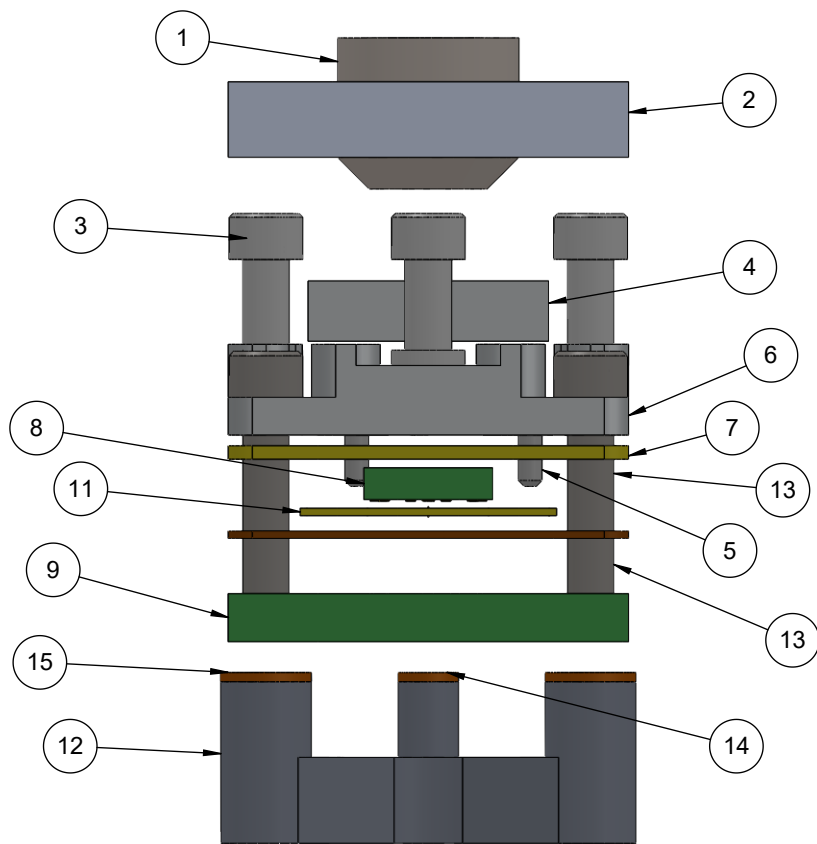
SIDE VIEW

### 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>SG25-QFN-2000 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 5.11	STATUS: Released ENG: S. Huang FILE: SG25-QFN-2000 Dwg	SHEET: 4 OF 5 DRAWN BY: M. Raske DATE: 08/13/2016	REV. A SCALE: 8:1




Insulation and backing plate detail

ITEM NO.	DESCRIPTION	Material
1	Compression Screw M6x1	Stainless Steel (18-8)
2	Socket Lid Swivel Lid 8mm IC	7075-T6 Aluminum Alloy
3	#0-80 Shoulder Screw, 1.59mm thread length	Stainless Steel (303)
4	Compression Plate	7075-T6 Alumium Alloy
5	Alignment Pin 1/32" dia. x 1/8" lng	Chrome Stainless Steel
6	Socket Base	7075-T6 Aluminum Alloy
7	IC (MLF) Guide for 7.87x4.26mm IC	Torlon 4203
8	Test Chip 7.87x4.26mm 0.5mm pitch QFN12	FR4 High temp
9	Test PCB 7.87x4.26mm 0.5mm pitch QFN12	FR4 High temp
10	Elastomer Guide 8x8mm 0.25mm thick	Kapton Polyimide/Cirlex/Ultem
11	0.25mm thick 0.05mm pitch 63 deg angled elastomer	SG Elastomer
12	Backing Plate, 5 post 8mm	7075-T6 Aluminum Alloy
13	#0-80 X .313 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
14	Insulating disk, 2mm OD with 2 mil thk Adesive	Kapton Polyimide/Cirlex
15	Insulating washer, 3mm OD.	Kapton Polyimide/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>SG25-QFN-2000 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 5.11	STATUS: Released	SHEET: 5 OF 5	REV. A
		ENG: S. Huang	DRAWN BY: M. Raske	SCALE: 4:1
		FILE: SG25-QFN-2000 Dwg	DATE: 08/13/2016	