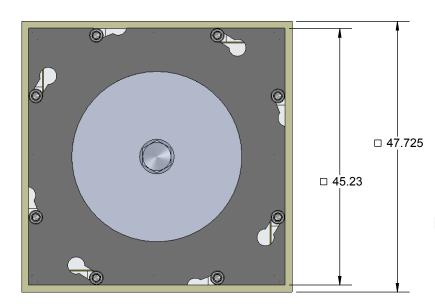
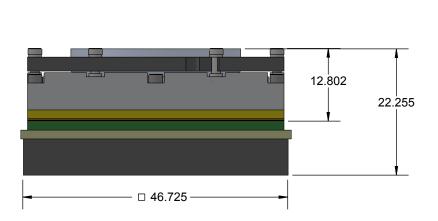
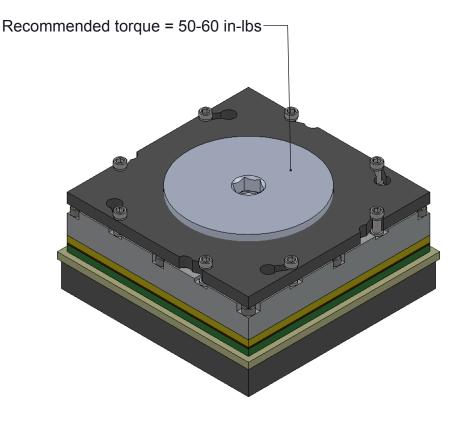
# GHz BGA Socket - Direct mount, solderless



### **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





## Description: GT-BGA 37.5x37.5mm IC 37x37 array 1mm pitch

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

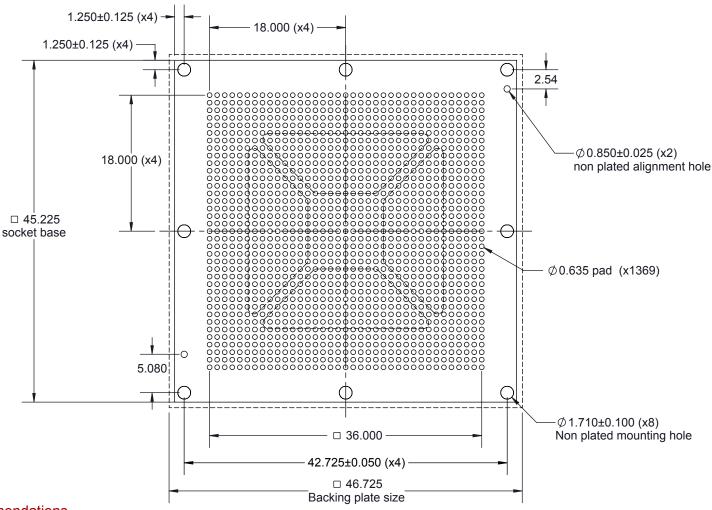
 $\frac{Tolerances:}{Lo.0254mm} \ [\pm 0.001"], Pitches (from true position) \pm 0.0762mm \ [\pm 0.003"], substrate thickness tolerance \pm 10\%, all other tolerances \pm 0.127mm \ [\pm 0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.$ 

GT-BGA-2003 Drawing	
4	Ironwood Electronics, Inc Tele: (800) 404-0204 www.ironwoodelectronics.c
V.	www.ironwoodelectronics.c

Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodélectronics.com

Material: N/A Finish: N/A Weight: 93.84

STATUS: Released	SHEET: 1 OF 4	REV. A
ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:2
FILE: GT-BGA-2003	DATE: 11/5/14	



Target PCB Recommendations
Total Thickness: 1.6mm min.
Plating: Gold or Solder finish.

PCB Pad Height: Same or higher than solder mask.

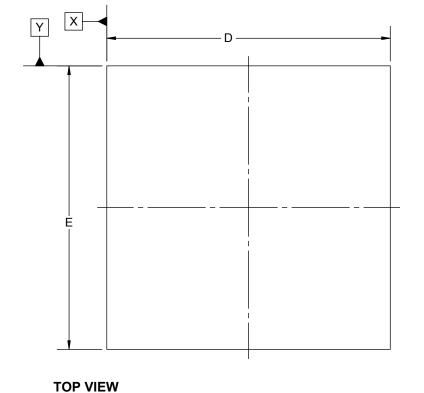
NOTE: Steel backing plate may be required based on end user's application.

### **Description: Recommended PCB Layout**

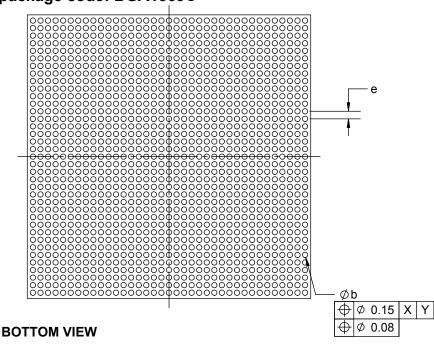
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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.

### 



### Ironwood package code: BGA1369C



SIDE VIEW

Dimensions are in millimeters.

DETAIL A SCALE 6 : 1

Ζ

DIM

Α

Α1

b

D

Ε

е

MIN

0.40

MAX

3.01

0.60

0.70

37.50 BSC

37.50 BSC

1.00 BSC

- 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.
- B. 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.

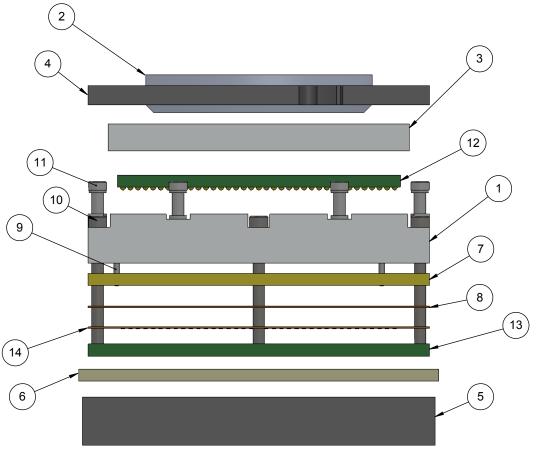
### **Description: Compatible Device**

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

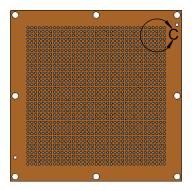
<u>Tolerances:</u> Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

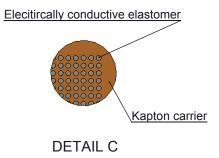
	GT-BGA-2003 Drawing	Material: N/A	STATUS: Released	SHEET: 3 OF 4	REV. A
9	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Weight: 93.84	ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 2:1
			FILE: GT-BGA-2003	DATE: 11/5/14	

0.20 Z



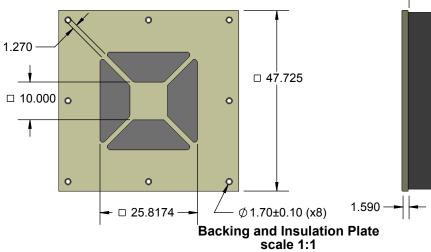
ITEM NO.	DESCRIPTION	Material
1	Socket Base 40mm IC 6.5mm thick	7075-T6 Aluminum Alloy
2	Compression Screw, M30	7075-T6 Aluminum Alloy
3	Compression Plate 39.95 x 3.5mm	7075-T6 Aluminum Alloy
4	Swivel Socket Lid 40mm IC	7075-T6 Aluminum Alloy
5	Ghz Backing Plate 40mm IC	7075-T6 Aluminum Alloy
6	Insulation Plate 40mm IC	FR4 Standard
7	IC Guide	Torlon 4203
8	Ball Guide	Kapton Polyimide/Cirlex
9	Dowel Pin, 1/32" x 3/16", SS	Chrome Stainless Steel
10	#0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
11	#0-80 Shoulder Screw, 0.090" thread length	Stainless Steel (303)
12	Test Chip	Material <not specified=""></not>
13	Test PCB	Material <not specified=""></not>
14	GT Elastomer 37.5mm IC 1mm pitch 37x37 array	Conductive Elastomer





6.350

Elastomer carrier with filled elastomer



# Description: Socket, Backing Plate Detail

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.

GT-BGA-2003 Drawing	
•	Ironwood Electronics, Inc Tele: (800) 404-0204 www.ironwoodelectronics.c

Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodélectronics.com

Material: N/A Finish: N/A Weight: 93.84

STATUS: Released	SHEET: 4 OF 4	REV. A
ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 2:1
FILE: GT-BGA-2003	DATE: 11/5/14	