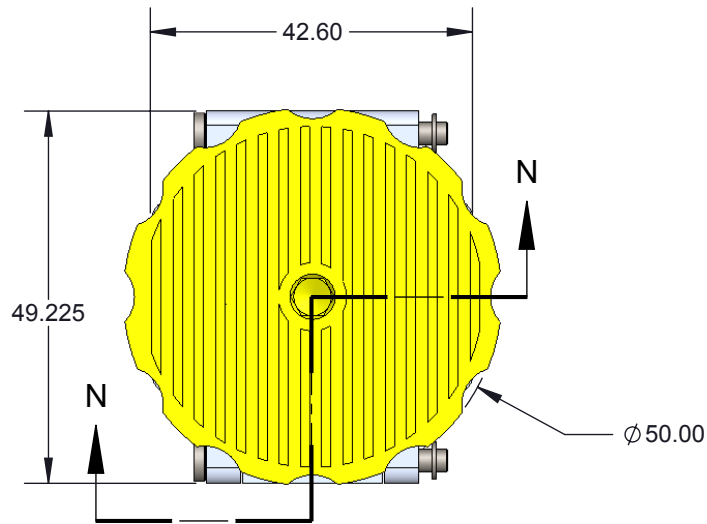


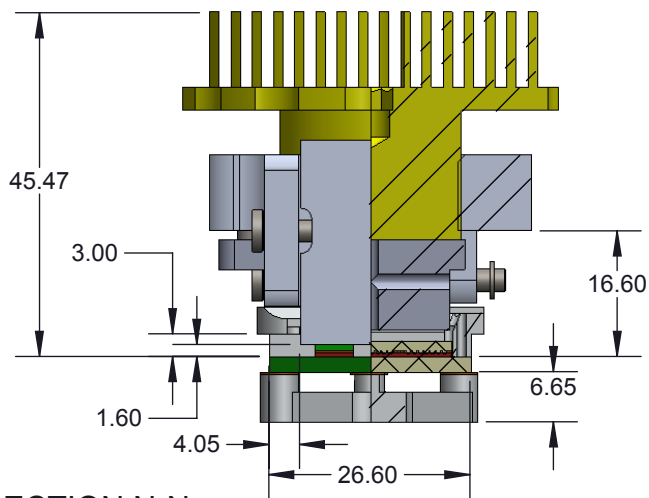
Silver Ball Matrix Elastomer Clamshell Socket

Features

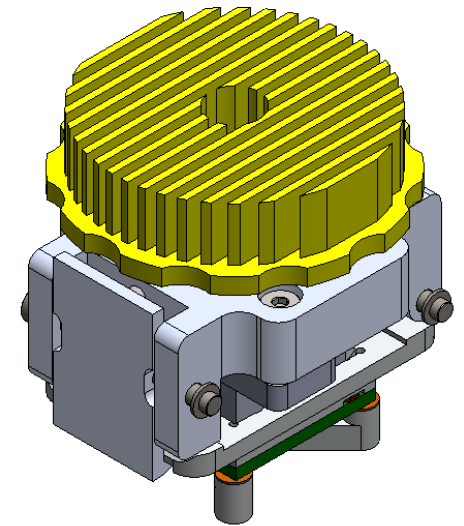
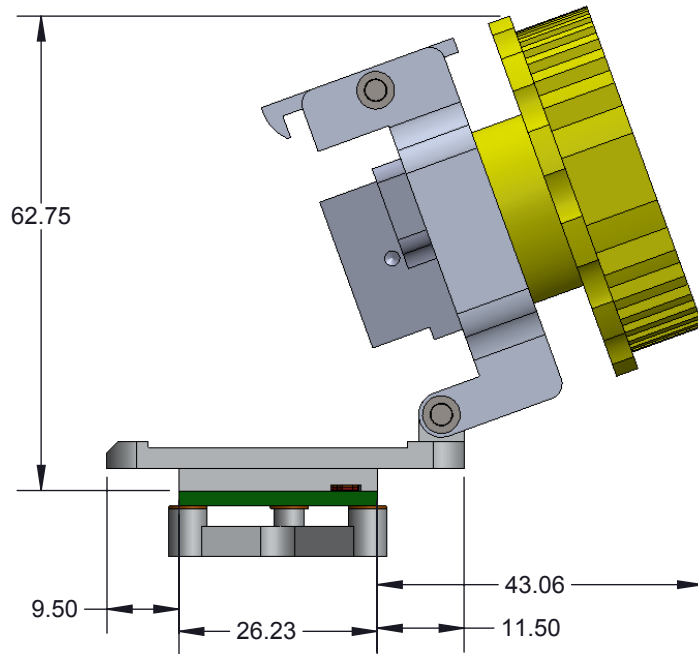
- Wide temperature range (-55C to +150C).
- Current capability is 4A per pin at 14C temperature rise.
- Over 40GHz bandwidth @-1dB for edge pins
- Low and stable contact resistance for reliable production yield.
- Self inductance under 0.21nH.
- Automated probe manufacturing enables low cost and short lead time.



TOP VIEW



SECTION N-N



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.

SM-BGA-9010 Drawing



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

WEIGHT: Material <not specified>
MATERIAL:
FINISH: 138.86

STATUS: Released

DRAWN BY: V. Panavala

File: SM-BGA-9010

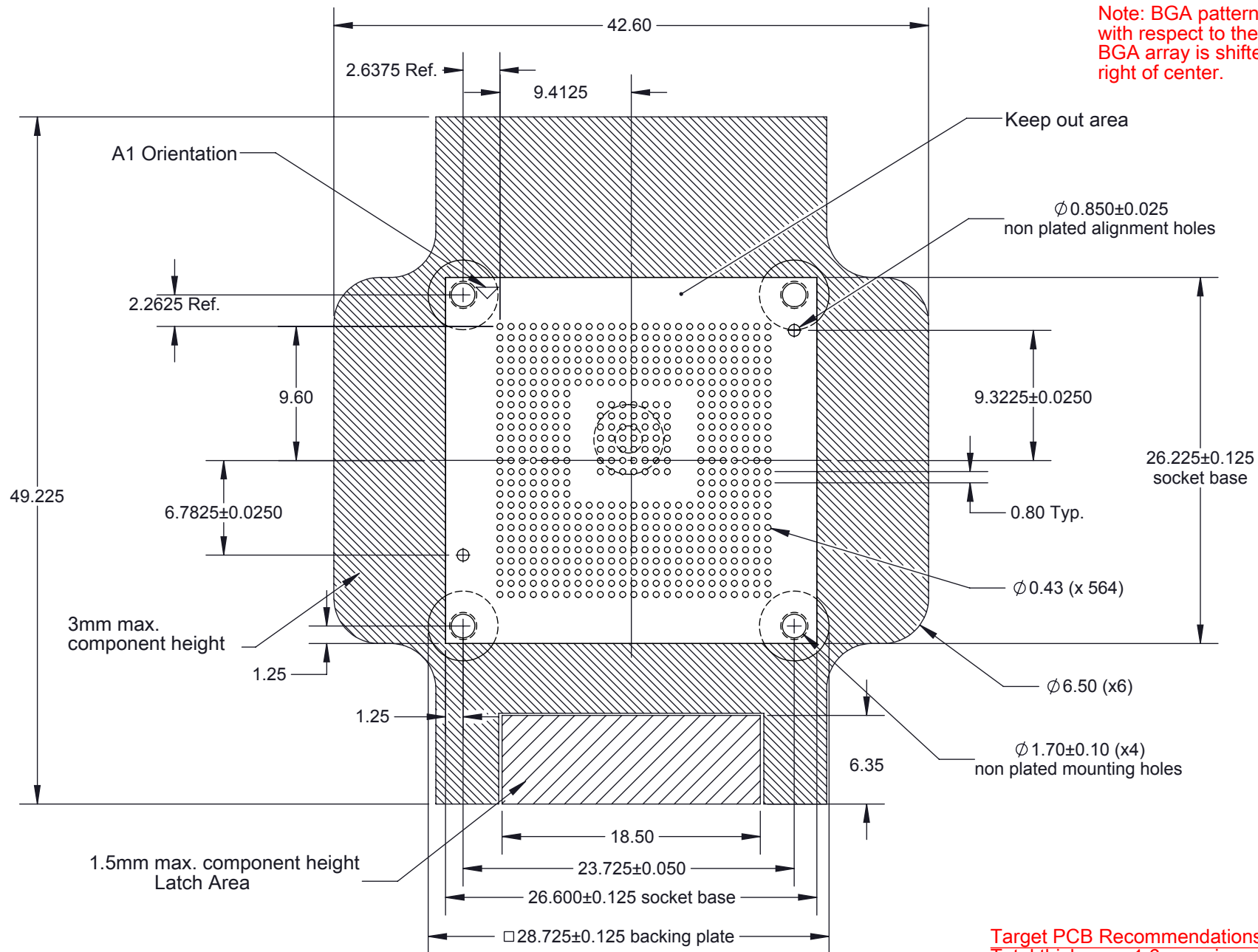
SHEET: 1 of 4

SCALE: 1:1

DATE: 8/19/2012

REV. A

Note: BGA pattern is not symmetrical with respect to the mounting holes. BGA array is shifted 0.375mm to the right of center.




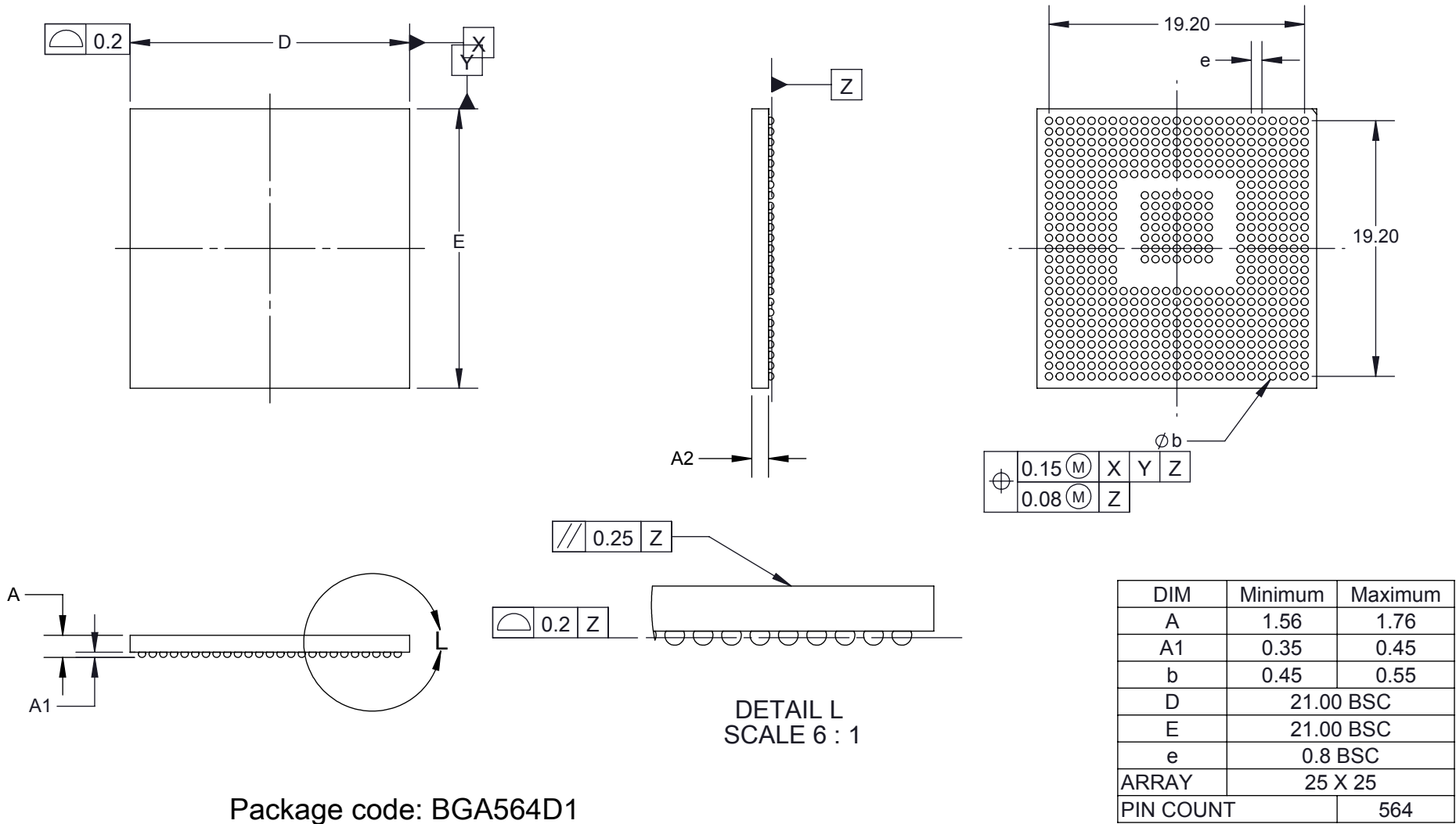
Target PCB Recommendations
 Total thickness: 1.6mm min.
 Plating: Gold or Solder finish
 PCB Pad height: same or higher than solder mask

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.


| | | | | | |
|--|----------------------------|---|-----------------------|-------------------|-----------------|
|  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | SM-BGA-9010 Drawing | Material: Finish: 138.86 Weight: Material <not specified> | STATUS: Released | SHEET: 2 OF 4 | REV. A |
| | | | DRAWN BY: V. Panavala | SCALE: 2.5:1 | |
| | | | | FILE: SM-BGA-9010 | DATE: 8/19/2012 |

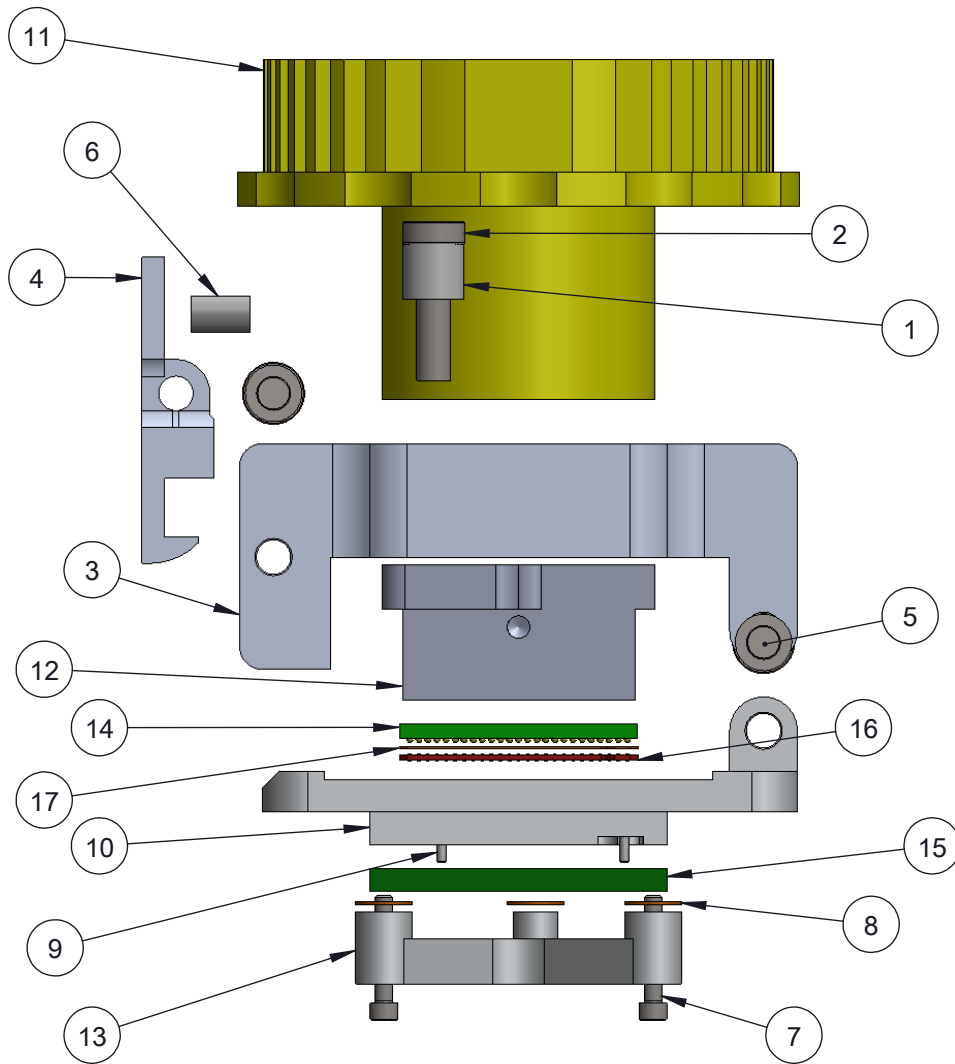


Package code: BGA564D1

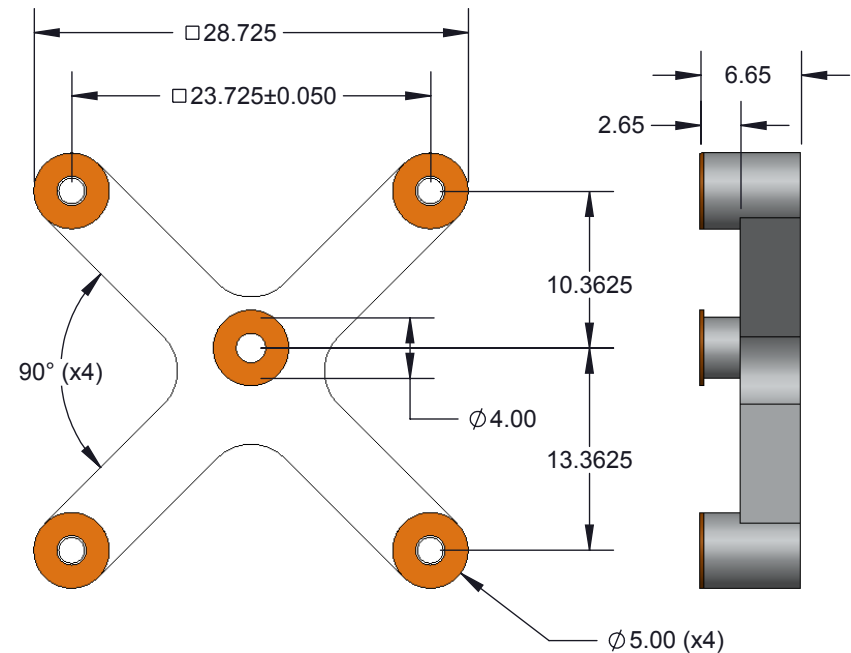
Description: Compatible BGA

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

| | | | | |
|--|---|--|---|--------|
|  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: Finish: 138.86 Weight: Material <not specified> | STATUS: Released DRAWN BY: V. Panavala FILE: SM-BGA-9010 | SHEET: 3 OF 4 SCALE: 2.25:1 DATE: 8/19/2012 | REV. A |
|--|---|--|---|--------|



| ITEM NO. | DESCRIPTION | Material |
|----------|--|-----------------------------|
| 1 | Spring Clamshell lid assembly | Steel Music Wire |
| 2 | Screw, M3 x 12mm, Low Head Cap, SS | 18-8 Stainless Steel |
| 3 | Socket Lid | 7075-T6 Aluminum Alloy |
| 4 | Latch | 7075-T6 Aluminum Alloy |
| 5 | Hinge Pin and Snap Ring, 3mm OD, 30mm long, 1045 Stl, Blk Oxide | AISI 1045 Steel, cold drawn |
| 6 | Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire | Zinc Plated Music Wire |
| 7 | #0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE | Alloy Steel |
| 8 | Insulating washer, 5mm OD. | Kapton Polyimide/Cirlex |
| 9 | Dowel Pin, 1/32" x 3/16", SS | Chrome Stainless Steel |
| 10 | SM Socket Base Clamshell 21mm | 7075-T6 Aluminum Alloy |
| 11 | Heat sink Compression Screw M24 threads | 7075-T6 Aluminum Alloy |
| 12 | CBT 21mm Compression plate Ni Plated | 7075-T6 Aluminum Alloy |
| 13 | Backing PLate 21mm IC 5 post | 7075-T6 Aluminum Alloy |
| 14 | BGA564 IC 21x21mm 0.8mm 25x25 array | FR4 Standard |
| 15 | PCB BGA564 21x21mm 0.8mm 25x25 array | FR4 Standard |
| 16 | SM interposer BGA564 21x21mm 0.8mm 25x25 array | Silmat |
| 17 | SM-Ball guide 0.8mm 25x25 array | Kapton Polyimide/Cirlex |




Description: Socket Assy, Insulation Plate

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.

Insulation Plate Specification

| | | | | |
|--|---|--|--|--------|
|  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: Finish: 138.86 Weight: Material <not specified> | STATUS: Released DRAWN BY: V. Panavala FILE: SM-BGA-9010 | SHEET: 4 OF 4 SCALE: 2:1 DATE: 8/19/2012 | REV. A |
|--|---|--|--|--------|