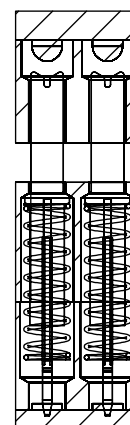
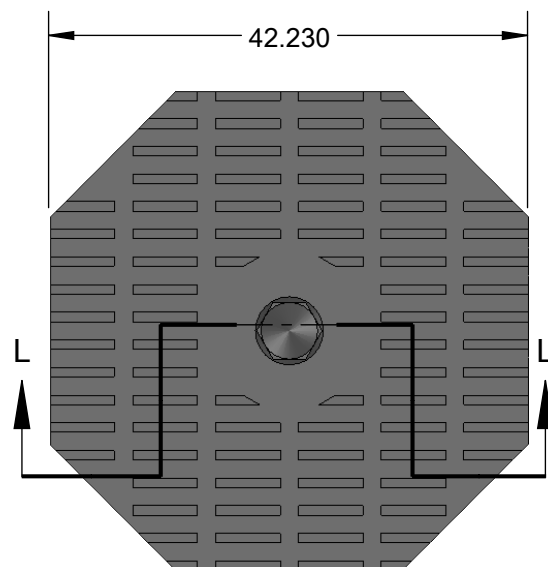


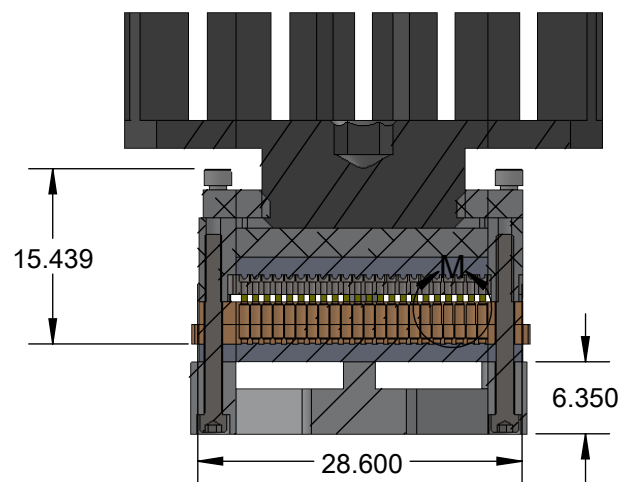
SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



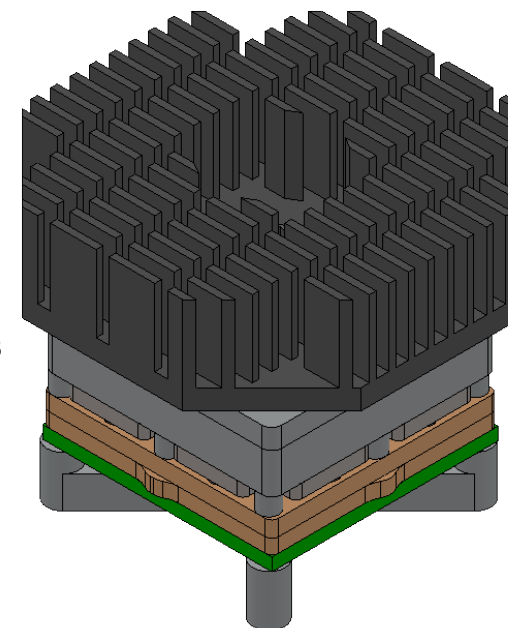
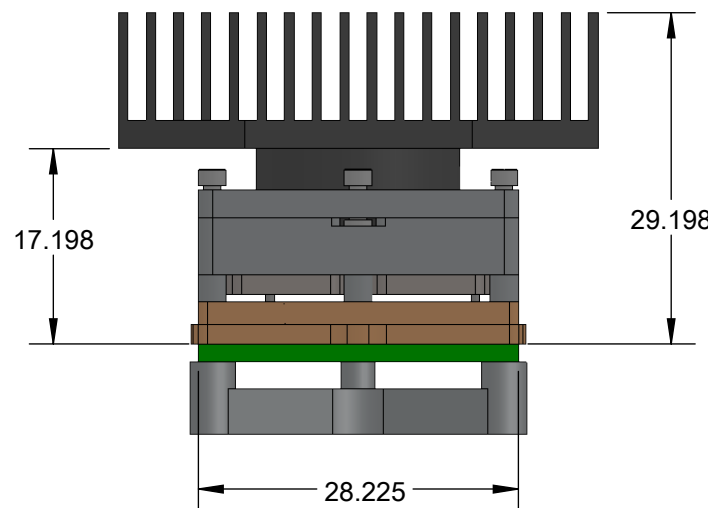
DETAIL M
SCALE 8 : 1

Features:

- Wide temperature range (-55C to +180C).
- High current capability (up to 4A).
- Excellent signal integrity at high frequencies.
- Low and stable contact resistance for reliable production yield.
- Highly compliant to accommodate wide co-planarity variations.
- Easily removable swivel lid




SECTION L-L



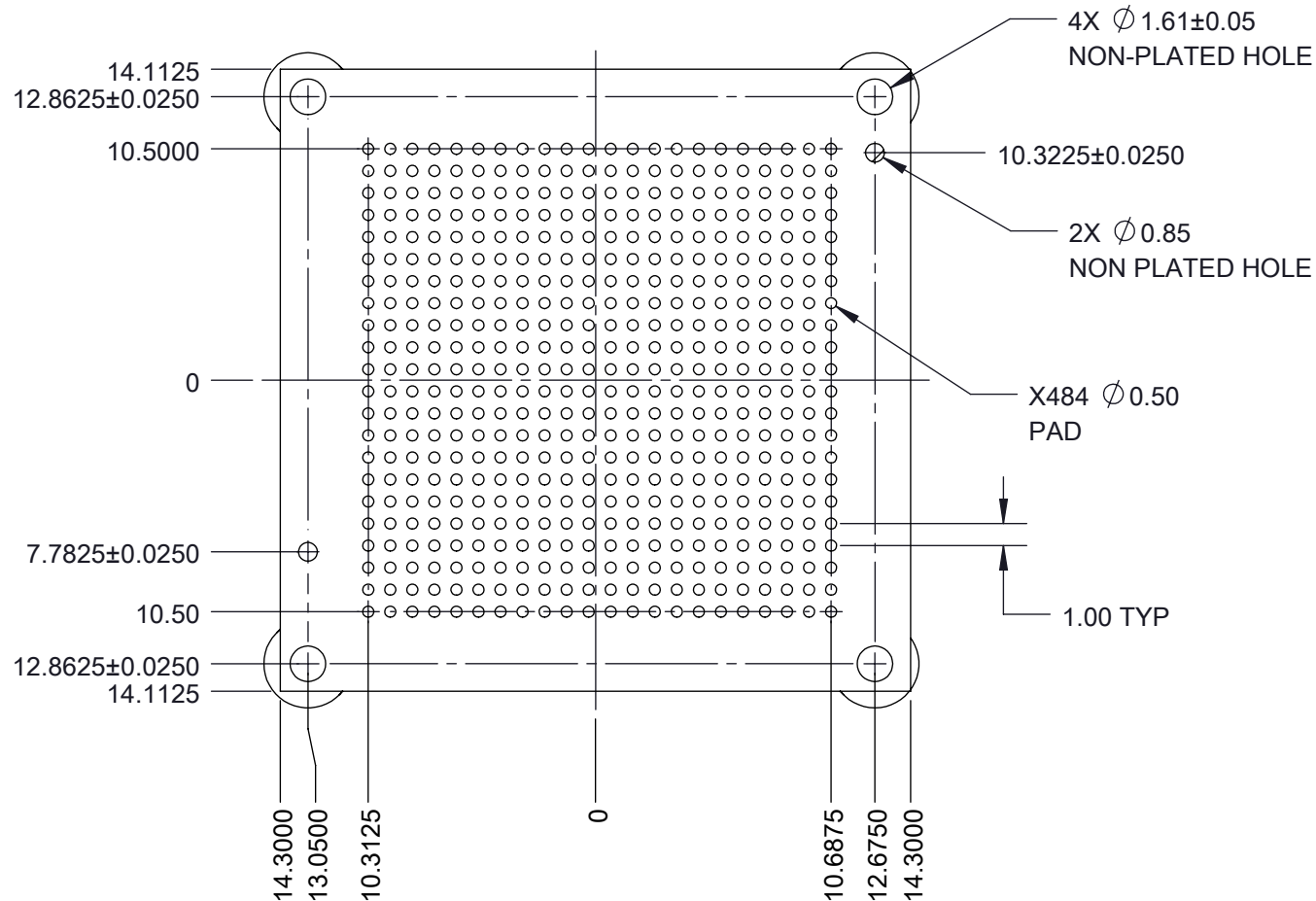
Description: SBT-BGA484 1MM 22x22 ARR SKT ASSEM

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.

| | | | | |
|---|---|--|--|----------------------|
| SBT-BGA-6004 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 48.38 | STATUS: Released ENG: V. Panavala FILE: SBT-BGA-6004 | SHEET: 1 OF 4 DRAWN BY: V. Panavala DATE: 2/7/13 | REV. B SCALE: 3:2 |
|---|---|--|--|----------------------|

Note: BGA pattern is not symmetrical
with respect to the mounting holes



DESCRIPTION: Recommended PCB Layout

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.

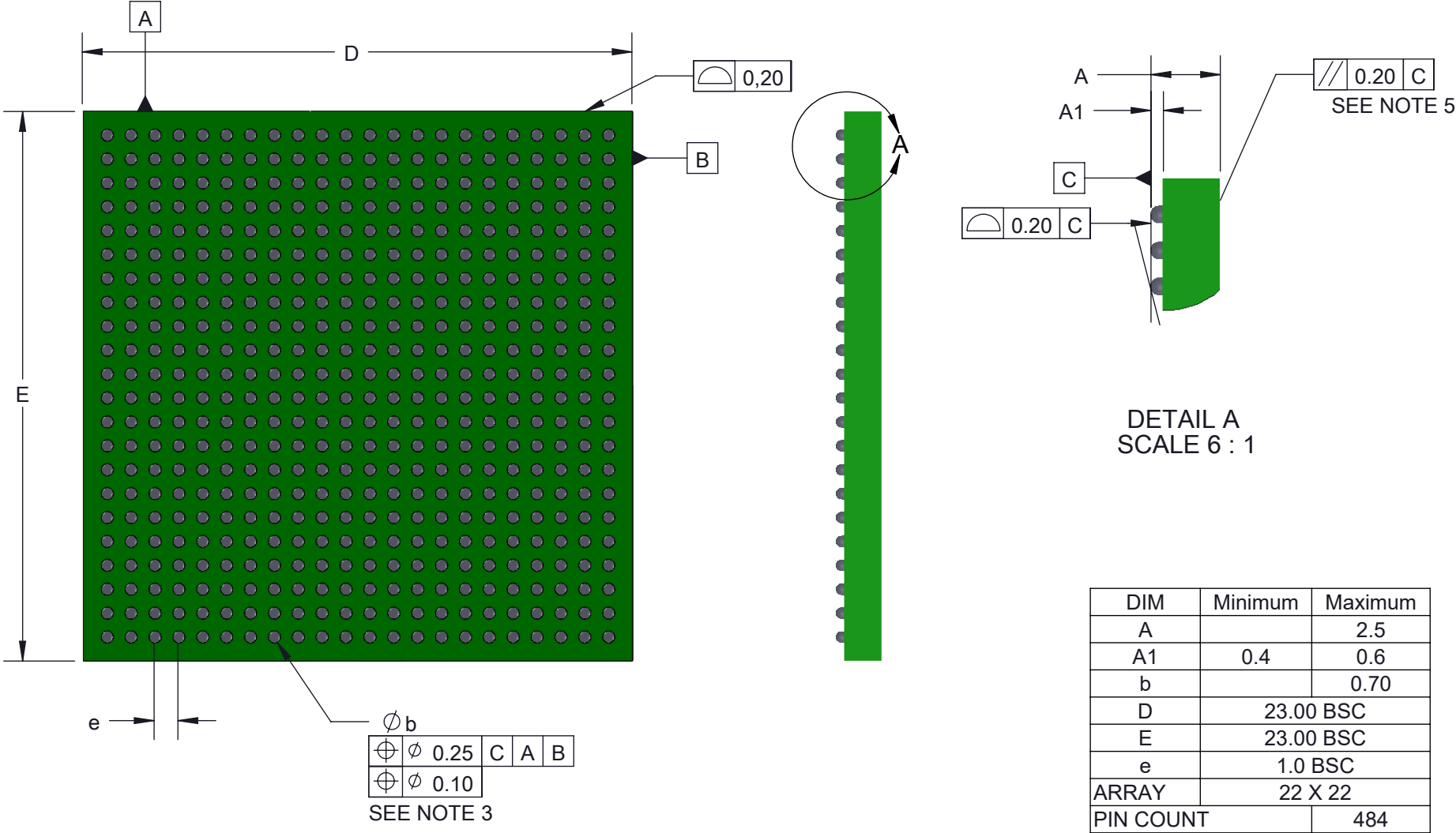
Target PCB Recommendations

Total thickness: 1.6mm min.

Plating: Gold or Solder finish

PCB Pad height: same or higher than solder mask

| | | | | | |
|--|---|---|--------------------|-----------------------|------------|
| SBT-BGA-6004 Drawing | | Material: N/A Finish: N/A Weight: 48.38 | STATUS: Released | SHEET: 2 OF 4 | REV. B |
|  | Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | | ENG: V. Panavala | DRAWN BY: V. Panavala | SCALE: 2:1 |
| | | | FILE: SBT-BGA-6004 | DATE: 2/7/13 | |
| | | | | | |




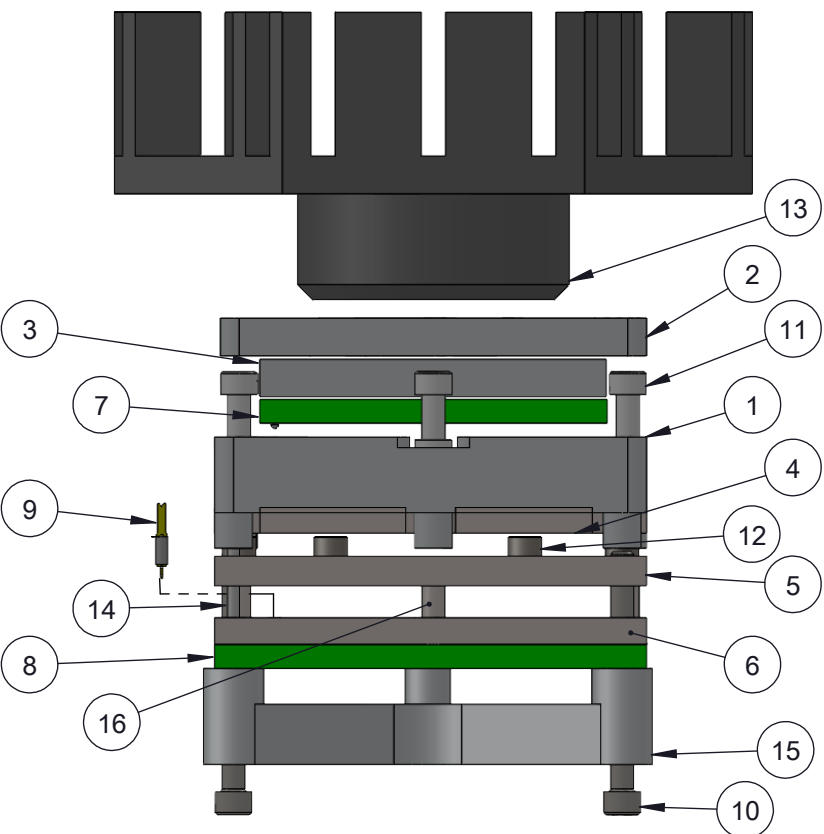
DESCRIPTION: Compatible BGA

Description: Compatible BGA

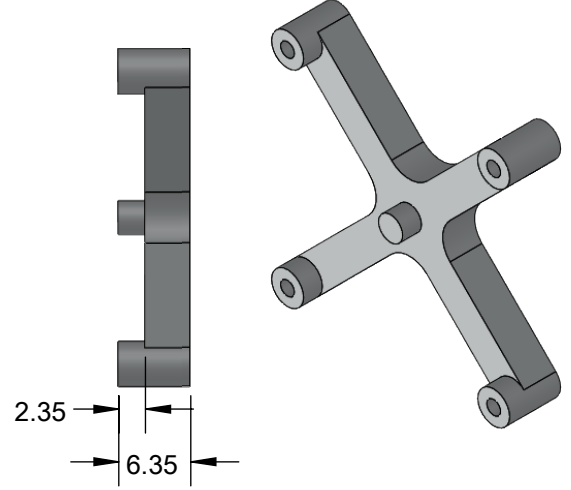
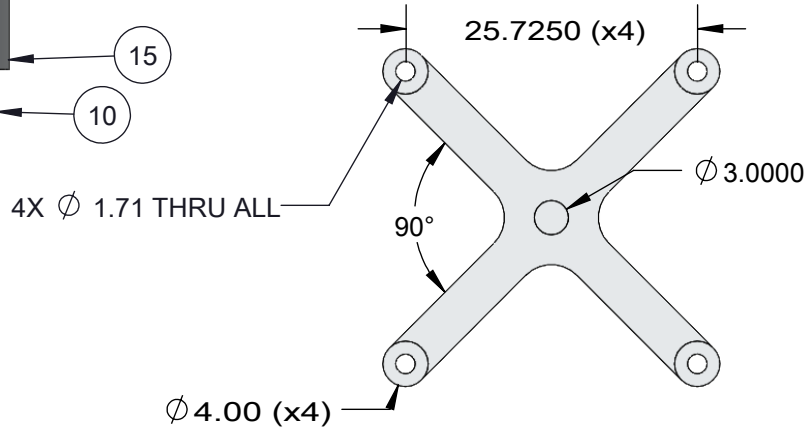
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$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

1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

| | | | | |
|--|---|--------------------|-----------------------|------------|
| <div>SBT-BGA-6004 Drawing</div> <div>Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</div> | Material: N/A Finish: N/A Weight: 48.38 | STATUS: Released | SHEET: 3 OF 4 | REV. B |
| | | ENG: V. Panavala | DRAWN BY: V. Panavala | SCALE: 2:1 |
| | | FILE: SBT-BGA-6004 | DATE: 2/7/13 | |
| | | | | |



| ITEM NO. | DESCRIPTION | Material |
|----------|---|--------------------------|
| 1 | SBT Ni Plt 23x3mm with 0.375 sft | 7075-T6, Plate (SS) |
| 2 | SBT Ni plt skt lid 23mm | 7075-T6, Plate (SS) |
| 3 | SBT COMP PLT NI PLT 23MM CSTM | 7075-T6, Plate (SS) |
| 4 | Floating Guide 23X23mm 1mm 22x22 arr | PEEK Ceramic filled |
| 5 | Middle Guide 23X23mm 1mm 22x22 arr | PEEK Ceramic filled |
| 6 | Bottom Guide 23X23mm 1mm 22x22 arr | PEEK Ceramic filled |
| 7 | BGA chip for 23x23mm 1mm, 22x22array | Material <not specified> |
| 8 | Target PCB for 23x23mm; 1mm, 22x22 | Material <not specified> |
| 9 | Pogo Pin, 1mm Pitch SBT BGA pin | |
| 10 | #0-80 X .625 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE | Alloy Steel |
| 11 | #0-80 Shoulder Screw, 1.59mm thread length | Stainless Steel (303) |
| 12 | Floating Guide Spring | Alloy Steel (SS) |
| 13 | compression screw | 7075-T6 Aluminum Alloy |
| 14 | Dowel Pin, 1/32" x 3/8", SS | Chrome Stainless Steel |
| 15 | SBT/CBT Backing Plate 23mm IC | 7075-T6 Aluminum Alloy |
| 16 | #0-80, 90 deg., head pin guide screw, Peek material | PEEK unfilled |




DESCRIPTION: Socket Assy, Insulation Plate

Description: Socket Assy, Insulation Plate

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.

Insulation Plate Specification

| Rev | Date | Initials | Description |
|-----|---------|----------|--|
| B | 3/25/16 | MR | Replaced plastic screws with peek screws |

| | | | | |
|--|---|--------------------|-----------------------|------------|
| SBT-BGA-6004 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 48.38 | STATUS: Released | SHEET: 4 OF 4 | REV. B |
| | | ENG: V. Panavala | DRAWN BY: V. Panavala | SCALE: 2:1 |
| | | FILE: SBT-BGA-6004 | DATE: 2/7/13 | |
| | | | | |