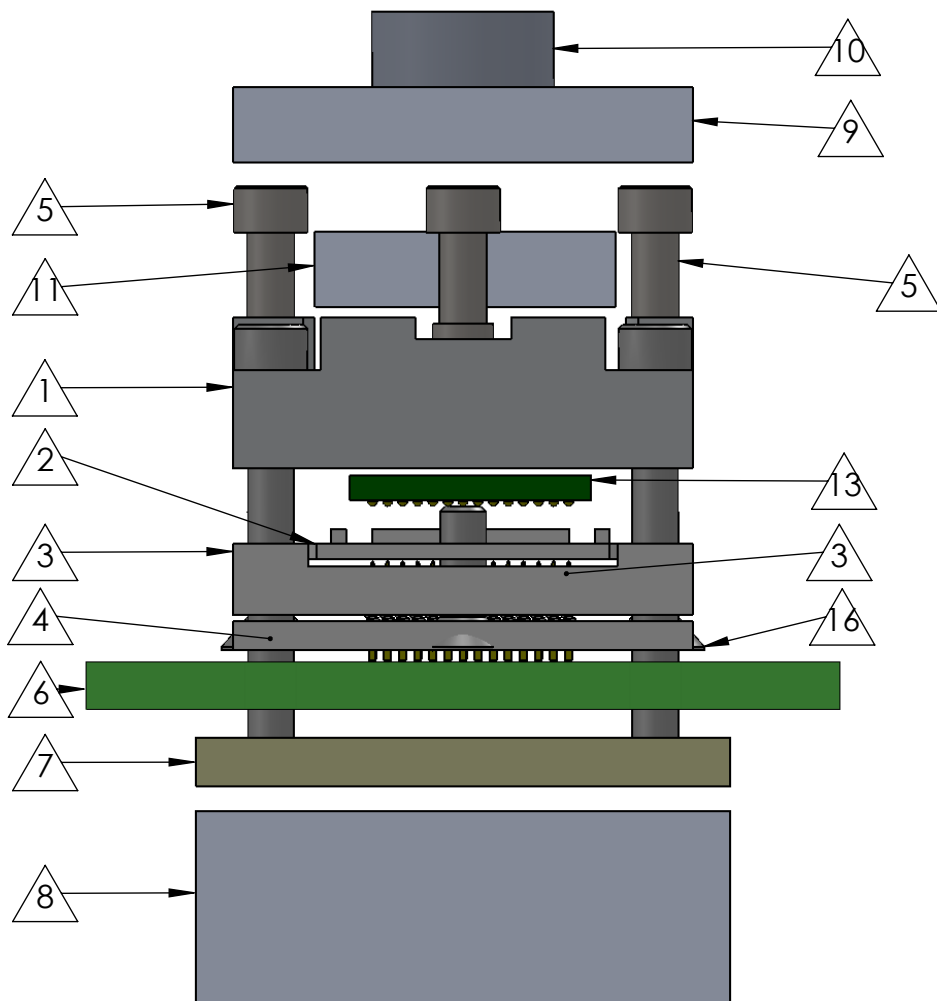


SBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



Features

- Wide temperature range (-55C to +180C)
- High current capability (up to 8A)
- Excellent signal integrity at high frequencies
- Low and stable contact resistance for reliable production yield
- Highly compliant to accommodate wide co-planarity variations
- Automated probe manufacturing enables low cost and short lead time

| ITEM NO. | PART NUMBER | Description | QTY. |
|----------|-------------|--|------|
| 1 | M2423 | Socket Base: Black Anodized Aluminium | 1 |
| 2 | P8369A | Floating Guide: Ceramic Filled Peek | 1 |
| 3 | P8370A | Middle Guide: Ceramic Filled Peek | 1 |
| 4 | P8371A | Bottom Guide: Ceramic Filled Peek | 1 |
| 5 | R2613 | Socket Shoulder screw: SS- #0-80 threads | 4 |
| 6 | Target PCB | Customers Target PCB | 1 |
| 7 | P5196A | Insulation Plate: FR4 | 1 |
| 8 | M1489 | Backing Plate: Black Anodizes Aluminium | 1 |
| 9 | M1144 | Compression Screw: Clear Anodized Aluminium | 1 |
| 10 | M1146 | Socket Lid: Black Anodized Aluminium | 1 |
| 11 | M1145 | Compression Plate :Black Anodized Aluminium | 1 |
| 12 | P-P149A | SBT-BGA 0.5mm pin | 196 |
| 13 | BGA196A | Customer's BGA device | 1 |
| 14 | R1693 | Alignment Pins | 2 |
| 15 | R1486 | Socket Base screw: Socket head cap, alloy steel with black oxide finish, 0-80 fine thread , 12.7mm long. | 4 |
| 16 | R1391 | Pin Guide screw:Flat head, alloy steel, 0-80 fine thread , 6.3mm long. | 4 |

Description: SBT-BGA 8x8mm, 0.5mm pitch, 14x14 array

Primary dimension units are millimeters, Secondary dimension units are [inches].

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 " unless stated otherwise. Materials and specifications are subject to change without notice.

SBT-BGA-7003 Drawing

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

WEIGHT: 12.50
MATERIAL:
FINISH:

STATUS: Released

DRAWN BY: Vinayak R

File: SBT-BGA-7003

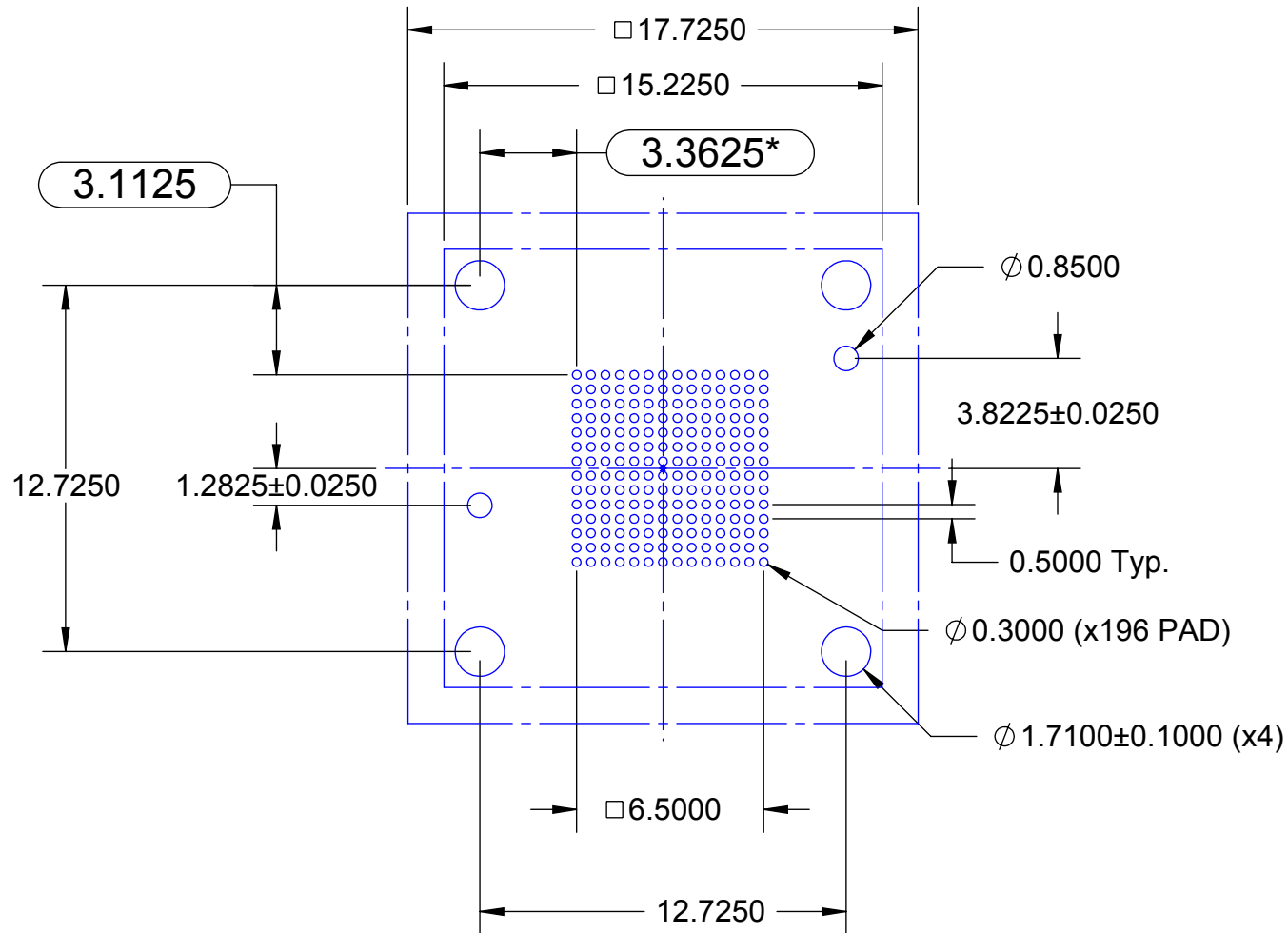
SHEET 1 OF 4

SCALE: 2:1

DATE: 5/21/2009

REV. A

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



Description: SBT-BGA-7003 Recommended Layout 8x8mm, 0.5mm pitch, 14x14 array

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

Primary dimension units are millimeters, Secondary dimension units are [inches].
 Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

SBT-BGA-7003 Drawing

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

WEIGHT:
 MATERIAL:
 FINISH:

STATUS: Released

DRAWN BY: Vinayak R

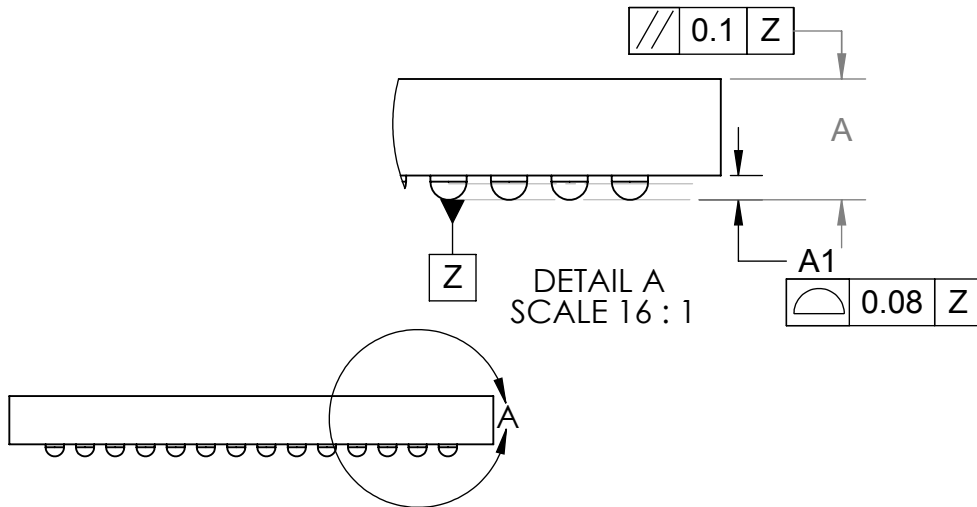
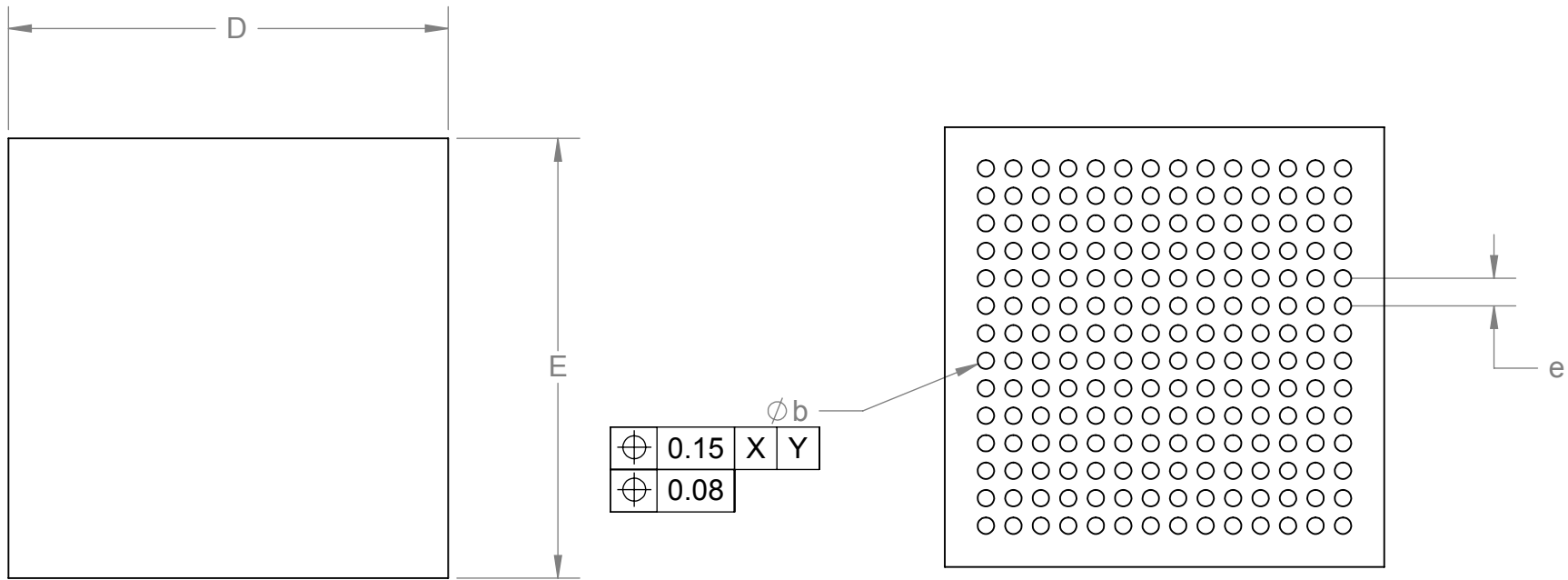
File: SBT-BGA-7003

SHEET 2 OF 4

SCALE: 4:1

DATE: 5/21/2009

REV. A



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.

| DIM | Minimum | Maximum |
|-----|---------|---------|
| A | | 2.5 |
| A1 | 0.2 | 0.4 |
| b | 0.25 | 0.4 |
| D | 8.0 BSC | |
| E | 8.0 BSC | |
| e | 0.5 BSC | |

Description: BGA with 196 pin with 0.5mm Pitch

Primary dimension units are millimeters, Secondary dimension units are [inches].
 Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

14x14 Array

SBT-BGA-7003 Drawing

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

WEIGHT:
 MATERIAL:
 FINISH:

STATUS:

DRAWN BY: Vinayak R

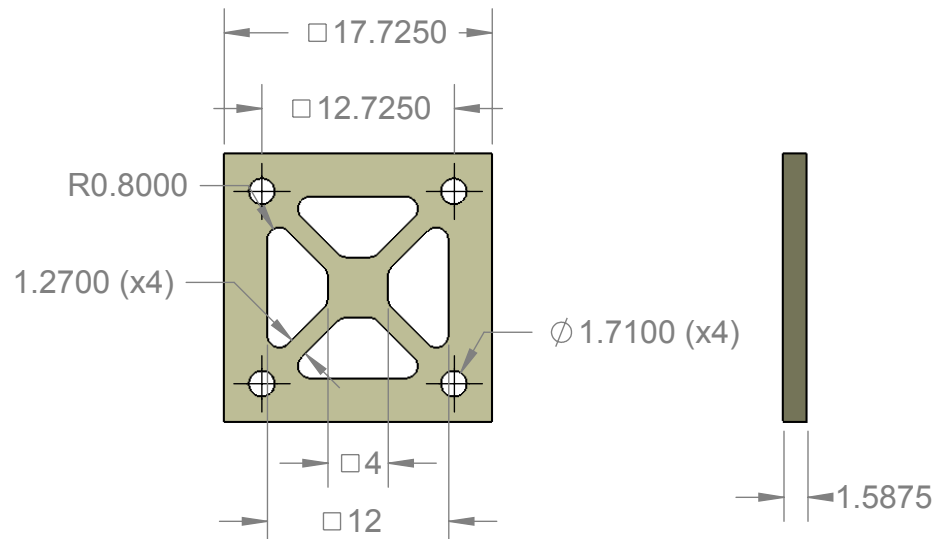
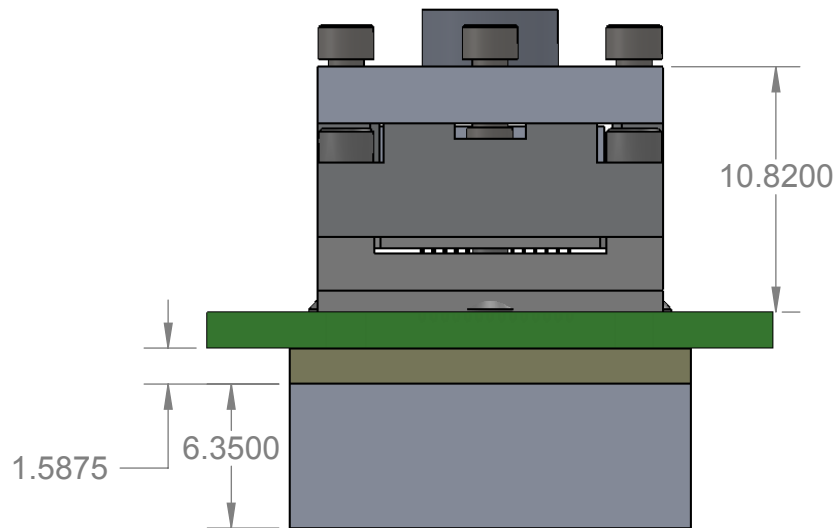
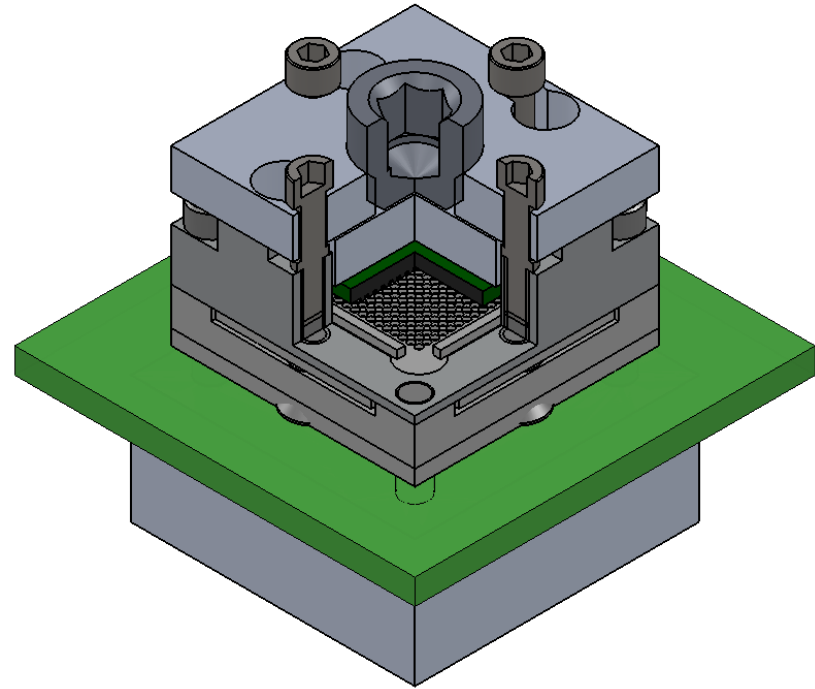
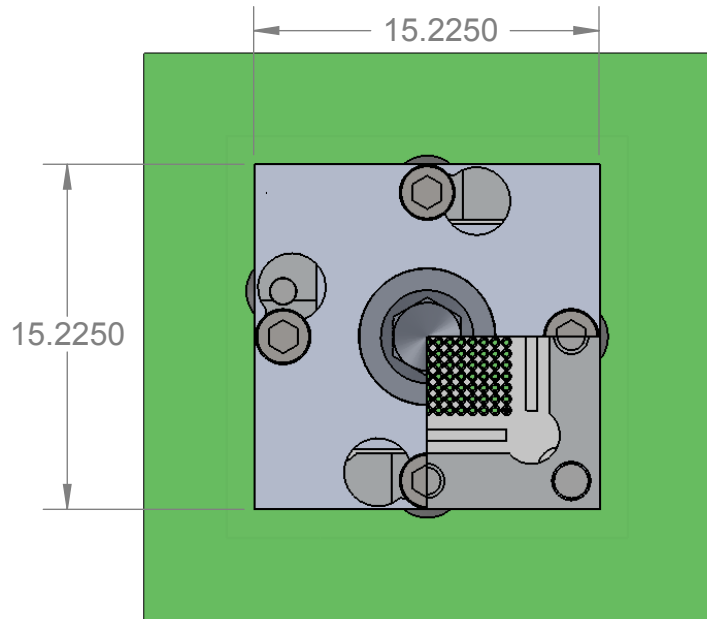
File: SBT-BGA-7003

SHEET 3 OF 4

SCALE: 8:1

DATE: 5/21/2009

REV. A



Description: Socket Assembly SBT-BGA 8x8mm, 0.5mm pitch, 14x14 array

Primary dimension units are millimeters, Secondary dimension units are [inches].

Tolerances: diameters $\pm 0.03\text{mm}$ [± 0.001 "], PCB perimeters $\pm 0.13\text{mm}$ [± 0.005 "], PCB thicknesses $\pm 0.18\text{mm}$ [± 0.007 "], pitches (from true position) $\pm 0.08\text{mm}$ [± 0.003 "], all other tolerances $\pm 0.13\text{mm}$ [± 0.005 "] unless stated otherwise. Materials and specifications are subject to change without notice.

Insulation Plate Specification

SBT-BGA-7003 Drawing

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

WEIGHT: 12.50
 MATERIAL:
 FINISH:

STATUS: Released

DRAWN BY: Vinayak R

File: SBT-BGA-7003

SHEET 4 OF 4

SCALE: 2:1

DATE: 5/21/2009

REV. A