

# BGA Heat Sink - High Performance Straight Fin w/maxiGRIP



|                         |                                                                                  |
|-------------------------|----------------------------------------------------------------------------------|
| ATS Part#:              | ATS-53330D-C1-R0                                                                 |
| Description:            | 33.00 x 33.00 x 9.50 mm BGA Heat Sink - High Performance Straight Fin w/maxiGRIP |
| Heat Sink Type:         | Straight Fin                                                                     |
| Heat Sink Attachment:   | maxiGRIP                                                                         |
| Equivalent Part Number: | ATS-53330D-C2-R0 Discontinued                                                    |

\*Image above is for illustration purpose only.

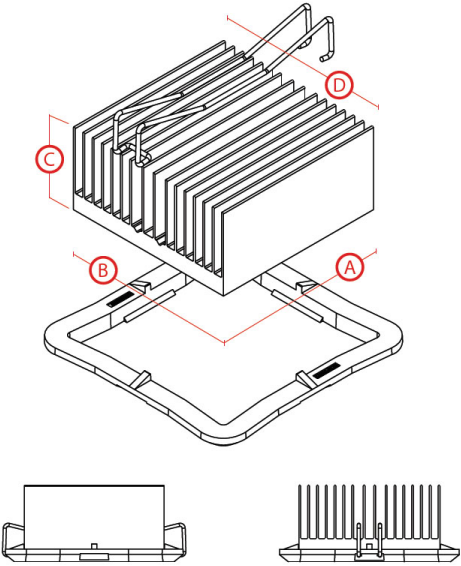
## Features & Benefits

- High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments
- maxiGRIP™ attachment applies steady, even pressure to the component and does not require holes in the PCB
- Designed specifically for BGAs and other surface mount packages
- Meets Telcordia GR-63-Core Office Vibration; ETSI 300 019 Transportation Vibration; and MIL-STD-810 Shock Testing and Unpackaged Drop Testing standards
- Comes preassembled with high performance, phase changing, thermal interface material

## Thermal Performance

| AIR VELOCITY       |               | @200 LFM<br>1.0 M/S | @300 LFM<br>1.5 M/S | @400 LFM<br>2.0 M/S | @500 LFM<br>2.5 M/S | @600 LFM<br>3.0 M/S | @700 LFM<br>3.5 M/S | @800 LFM<br>4.0 M/S |
|--------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| THERMAL RESISTANCE | Unducted Flow | 11.1 °C/W           | 8.1 °C/W            | 6.8 °C/W            | 6 °C/W              | 5.4 °C/W            | 5 °C/W              | 4.7 °C/W            |
|                    | Ducted Flow   | 5                   | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 |

## Product Detail

| Schematic Image                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Dimension A | Dimension B | Dimension C | Dimension D | TIM  | Finish         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|------|----------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 33.00 mm    | 33.00 mm    | 9.50 mm     | N/A mm      | T766 | BLACK-ANODIZED |
| <p><b>Notes:</b></p> <ul style="list-style-type: none"><li>• Dimension <b>A</b> and <b>B</b> refer to component size.</li><li>• Dimension <b>C</b> is the heat sink height from the bottom of the base to the top of the fin field.</li><li>• ATS-53330D-C2-R0 is the exact heat sink assembly with an equivalent thermal interface material (Saint Gobain C1100F). NOTE: Saint Gobain C1100F is discontinued effective 12/31/10.</li><li>• Thermal performance data are provided for reference only. Actual performance may vary by application.</li><li>• ATS reserves the right to update or change its products without notice to improve the design or performance.</li><li>• ATS certifies that this heat sink assembly is RoHS-6 and REACH compliant.</li><li>• Optional maxiGRIP™ Installation/Removal Tool Set P/N: <b>MGT170</b></li><li>• Contact ATS to learn about custom options available.</li></ul> |             |             |             |             |      |                |

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For more information, to find a distributor or to place an order, please contact us at 781-769-2800 (North America), [sales@qats.com](mailto:sales@qats.com) or [www.qats.com](http://www.qats.com).

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