

# Ultra High Performance BGA Cooling Solutions w/ maxiGRIP™ Attachment



ATS Part#: **ATS-51210D-C1-R0**  
 Description: maxiFLOW™ maxiGRIP™ HS Assembly- LP, T766, BLACK- ANODIZED

Heat Sink Type: maxiFLOW  
 Heat Sink Attachment: maxiGRIP  
 Equivalent Part Number: **ATS-51210D-C2-R0 Discontinued**

*\*Image above is for illustration purpose only.*

## Features & Benefits

- **maxiFLOW™** design features a low profile, spread fin array that maximizes surface area for more effective convection (air) cooling
- **maxiGRIP™** attachment applies steady, even pressure to the component and does not require holes in the PCB
- Meets Telcordia GR-63-Core Office Vibration; ETSI 300 019 Transportation Vibration; and MIL-STD-810 Shock and Unpackaged Drop Testing standards
- Comes pre-assembled with high performance, phase changing, thermal interface material
- Designed for low profile components from 1.5 to 2.99mm
- "Keep-Out" Requirements: An "Un-Populated" border zone of 5mm around the component is necessary to facilitate the Installation/Removal of the **maxiGRIP™**. Please refer to the **maxiGRIP™** Keep-Out Guidelines and **maxiGRIP™** Installation/Removal Instructions for further details.

## 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 | 12.01 °C/W          | 9.66 °C/W           | 8.35 °C/W           | 7.47 °C/W           | 6.83 °C/W           | 6.33 °C/W           | 5.93 °C/W           |
|                    | Ducted Flow   | 7.98                | 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          |
|---|-------------|-------------|-------------|-------------|------|-----------------|
| <p><i>*Image above is for illustration purpose only.</i></p>  | 21.0 mm     | 21.0 mm     | 9.5 mm      | 34.6 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-51210D-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 <b>maxiGRIP™</b> Installation/Removal Tool Set P/N: <b>MGT210</b></li> <li>• Contact ATS to learn about custom options available.</li> </ul> |             |             |             |             |      |                 |

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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