# BGA Heat Sink - High Performance maxiFLOW/maxiGRIP-Low Profile



ATS Part#: Description:

#### ATS-51210R-C1-R0

21.00 x 21.00 x 19.50 mm BGA Heat Sink - High Performance maxiFLOW/maxiGRIP-Low Profile

 Heat Sink Type:
 maxiFLOW

 Heat Sink Attachment:
 maxiGRIP

 Equivalent Part Number:
 ATS-51210R-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 preassembled with high performance, phase changing, thermal interface material
- Designed for low profile components from 1.5 to 2.99mm

## **Thermal Performance**

AIR VELOCITY		@200 LFM 1.0 M/S	@300 LFM 1.5 M/S	@400 LFM 2.0 M/S	@500 LFM 2.5 M/S	@600 LFM 3.0 M/S	@700 LFM 3.5 M/S	@800 LFM 4.0 M/S
THERMAL RESISTANCE	Unducted Flow	5.3 °C/W	4.4 °C/W	3.8 °C/W	3.4 °C/W	3.2 °C/W	2.9 °C/W	2.8 °C/W
	Ducted Flow	4.2	N/A	N/A	N/A	N/A	N/A	N/A

## **Product Detail**

Schematic Image	Dimension A	Dimension B	Dimension C	Dimension D	ТІМ	Finish				
An An	21.00 mm	21.00 mm	19.50 mm	38.2 mm	T766	BLACK- ANODIZED				
	<ul> <li>Notes:</li> <li>Dimension A and B refer to component size.</li> <li>Dimension C is the heat sink height from the bottom of the base to the top of the fin field.</li> <li>ATS-51210R-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> </ul>									
	<ul> <li>Optional maxiGRIP<sup>TM</sup> Installation/Removal Tool Set P/N: MGT210</li> <li>Contact ATS to learn about custom options available.</li> </ul>									
*Image above is for illustration purpose only.										

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



© 2013 Advanced Thermal Solutions, Inc. | 89-27 Access Road | Norwood MA | 02062 | USA

