

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



ATS Part#: **ATS-51190D-C1-R0**
 Description: 19.00 x 19.00 x 9.50 mm BGA Heat Sink - High Performance maxiFLOW/maxiGRIP-Low Profile
 Heat Sink Type: maxiFLOW
 Heat Sink Attachment: maxiGRIP
 Equivalent Part Number: ATS-51190D-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	16.7 °C/W	13.6 °C/W	11.8 °C/W	10.5 °C/W	9.6 °C/W	8.9 °C/W	8.4 °C/W
	Ducted Flow	11.6	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>	19.00 mm	19.00 mm	9.50 mm	31.5 mm	T766	BLACK- ANODIZED
Notes: <ul style="list-style-type: none"> • Dimension A and B refer to component size. • Dimension C is the heat sink height from the bottom of the base to the top of the fin field. • ATS-51190D-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. • Thermal performance data are provided for reference only. Actual performance may vary by application. • ATS reserves the right to update or change its products without notice to improve the design or performance. • ATS certifies that this heat sink assembly is RoHS-6 and REACH compliant. • Optional maxiGRIP™ Installation/Removal Tool Set P/N: MGT190 • Contact ATS to learn about custom options available. 						

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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Heat Sinks](#) category:

Click to view products by [Advanced Thermal Solutions](#) manufacturer:

Other Similar products are found below :

[581102B00000G](#) [656-15ABPE](#) [657-20ABPNE](#) [7020B-TC12-MTG](#) [73452PPBA](#) [7G0011A](#) [PF720G](#) [A22-4026](#) [120-1873-007](#) [HAH10L](#)
[HAH15L](#) [1542616-1](#) [HS-2506-F1](#) [HS-87M0-F2](#) [218-40CTE3](#) [231-69PAB-15V](#) [25-7520](#) [SW50-4G](#) [231-75PAB-13V](#) [231-75PAB-15V](#) [253-](#)
[122ABE-22](#) [PSC22CB](#) [HAF10L](#) [HAQ10T](#) [D10100-28](#) [BDN183CBA01](#) [3-21053-4](#) [32438](#) [TX0506-1B](#) [TX1806B](#) [LAE66A3CB](#) [WA-DT2-](#)
[101E](#) [511-3U](#) [73381PPBA](#) [73403PPBA](#) [7G0047C](#) [COMX-440-HSP](#) [510-12M](#) [D10650-40T5](#) [V8511 Y](#) [APF40-40-13CB/A01](#)
[780653U04500G](#) [ATS-54310K-C2-R0](#) [FK 216 CB SA](#) [FK 231 SA 220](#) [648-51AB](#) [657-20ABPESC](#) [2341BG](#) [679-25AG](#) [FK 212 CB SA](#)