

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



ATS Part#: **ATS-X51190K-C1-R0**

Description: 19.00 x 19.00 x 14.50 mm BGA Heat Sink - High Performance maxiFLOW/superGRIP-Low-Profile

Heat Sink Type: **maxiFLOW**

Heat Sink Attachment: **superGRIP**

Equivalent Part Number: **N/A**

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

## Features & Benefits

- Requires minimal space around the component's perimeter; ideal for densely populated PCBs
- Allows the heat sink to be detached and reattached without damaging the component or the PCB, an important feature in the event a PCB may need to be reworked
- Strong, uniform attachment force helps achieve maximum performance from phase-change TIMs
- Eliminates the need to drill mounting holes in the PCB
- Assembly comes standard with a high performance maxiFLOW™ heat sink, which maximizes convection (air) cooling. Please refer to the superGRIP™ Keep-Out Guidelines and superGRIP™ Installation/Removal Guide for further details
- Comes standard with clean break, reworkable, Chomerics T-766 phase change material
- Designed for standard height components, from 1.5 to 2.9 mm

## 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	10.1 °C/W	8.3 °C/W	7.2 °C/W	6.4 °C/W	5.9 °C/W	5.5 °C/W	5.1 °C/W
	Ducted Flow	7.9	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	14.50 mm	34.76 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>• 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>• 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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