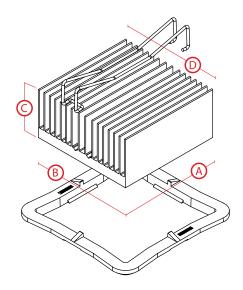


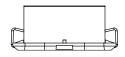
# High Performance BGA Cooling Solutions w/ maxiGRIP™ Attachment

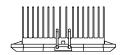
## ATS PART # ATS-53190K-C2-R0

### **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







\*Image above is for illustration purposes only.

# **Thermal Performance**

| AIR VELOCITY |     | THERMAL RESISTANCE   |                    |  |
|--------------|-----|----------------------|--------------------|--|
| FT/MIN       | M/S | °C/W (UNDUCTED FLOW) | °C/W (DUCTED FLOW) |  |
| 200          | 1.0 | 12                   | 7.4                |  |
| 300          | 1.5 | 9.6                  |                    |  |
| 400          | 2.0 | 8.4                  |                    |  |
| 500          | 2.5 | 7.5                  |                    |  |
| 600          | 3.0 | 6.9                  |                    |  |
| 700          | 3.5 | 6.4                  |                    |  |
| 800          | 4.0 | 6                    |                    |  |

### **Product Details**

| DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D | INTERFACE MATERIAL  | FINISH         |
|-------------|-------------|-------------|-------------|---------------------|----------------|
| 19 mm       | 19 mm       | 14.5 mm     | 19 mm       | SAINT-GOBAIN C1100F | BLACK-ANODIZED |

#### NOTES

- Dimension C = heat sink height from bottom of the base to the top of the fin field.
- ATS-53190K-C1-R0 is a subsitute item available utilizing an equivalent phase change material (Chomerics T766).
- 3) 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.
- 5) Optional maxiGRIP™ Installation/Removal Tool Set P/N: MGT190
- 6) Contact ATS to learn about custom options available.



For more information, to find a distributor or to place an order, visit www.qats.com or call: 781.769.2800 (North America); +31 (0) 3569 84715 (Europe).