



High Performance BGA Cooling Solutions w/ maxiGRIP™ Attachment

ATS PART # ATS-53190R-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 | 8.4 | 5.3 |
| 300 | 1.5 | 6.8 | |
| 400 | 2.0 | 5.9 | |
| 500 | 2.5 | 5.3 | |
| 600 | 3.0 | 4.9 | |
| 700 | 3.5 | 4.5 | |
| 800 | 4.0 | 4.3 | |

Product Details

| DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D | INTERFACE MATERIAL | FINISH |
|-------------|-------------|-------------|-------------|---------------------|----------------|
| 19 mm | 19 mm | 19.5 mm | 19 mm | SAINT-GOBAIN C1100F | BLACK-ANODIZED |

NOTES:

- 1) Dimension C = heat sink height from bottom of the base to the top of the fin field.
- 2) ATS-53190R-C1-R0 is a substitute 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.
- 4) 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.



ATS ADVANCED THERMAL SOLUTIONS, INC.
Innovations in Thermal Management®

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).