



Ultra High Performance BGA Cooling Solutions w/ maxiGRIP™ Attachment

ATS PART # ATS-51190D-C2-R0

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



**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	16.7	11.6
300	1.5	13.6	
400	2.0	11.8	
500	2.5	10.5	
600	3.0	9.6	
700	3.5	8.9	
800	4.0	8.4	

Product Details

DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	INTERFACE MATERIAL	FINISH
19 mm	19 mm	9.5 mm	31.5 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-51190D-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.



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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).