

# High Performance BGA Cooling Solutions w/ maxiGRIP™ Attachment\*

DIGI-KEY PART # **ATS1180-ND**

ATS PART # ATS-53190R-C2-R0

## Features & Benefits

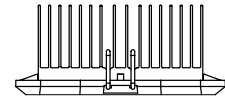
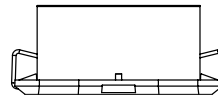
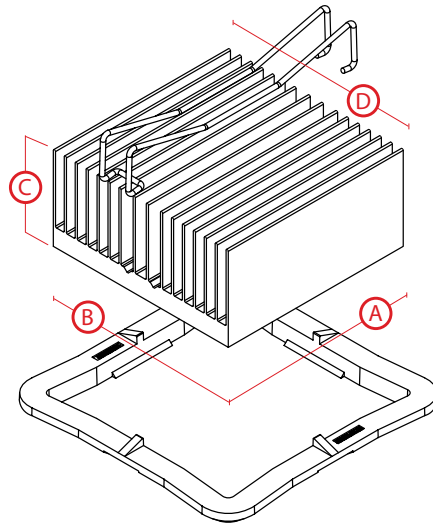
High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments

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



## Thermal Performance Table

AIR VELOCITY		THERMAL RESISTANCE	
FT/MIN	M/S	°C/W (UNDUCTED)	°C/W (DUCTED)
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	TIM‡	FINISH
19	19	19.5	N/A	C1100F	BLACK-ANODIZED

For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or [www.qats.com](http://www.qats.com)

\* RoHS Compliant

‡ TIM = Thermal Interface Material

† Dimensions are measured in millimeters

◆ Dimensions A & B refer to component size

§ Dimension C = the height of the heat sink shown above and does not include the height of the attachment method



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