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

### DIGI-KEY PART # ATS1149-ND

ATS PART # ATS-53210D-C2-R0

#### Features & Benefits

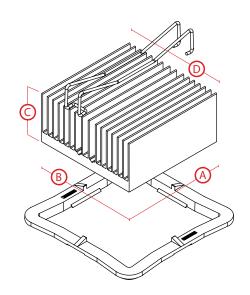
High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments

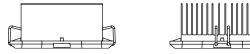
maxiGRIP™ attachment applies steady, even pressure to the component and does not require holes in the PCB

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





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SOLUTIONS, INC.

## **Thermal Performance Table**

AIR VELOCITY		THERMAL RESISTANCE		
FT/MIN	M/S	°C/W (UNDUCTED)	°C/W (DUCTED)	
200	1.0	20.2	10.9	
300	1.5	16.2		
400	2.0	14		
500	2.5	12.5		
600	3.0	11.5		
700	3.5	10.6		
800	4.0	10		

## **Product Details**<sup>†</sup>

DIMENSION A	DIMENSION B	DIMENSION C <sup>§</sup>	DIMENSION D	TIM <sup>‡</sup>	FINISH
21	21	9.5	N/A	C1100F	BLACK-ANODIZED

For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or **www.qats.com** 

\* RoHS Compliant

‡ TIM = Thermal Interface Material

† Dimensions are measured in millimeters

Dimensions A & B refer to component size
Dimension C = the beight of the best side a

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

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To place an order, please visit **www.digikey.com**