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

### DIGI-KEY PART # ATS1178-ND

ATS PART # ATS-53450K-C2-R0

#### Features & Benefits

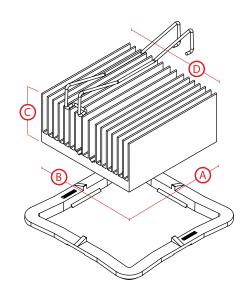
High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments

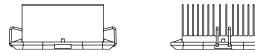
maxiGRIP™ attachment applies steady, even pressure to the component and does not require holes in the PCB

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 thermal interface material





## **Thermal Performance Table**

AIR VELOCITY		THERMAL RESISTANCE		
FT/MIN	M/S	°C/W (UNDUCTED)	°C/W (DUCTED)	
200	1.0	4.1	1.9	
300	1.5	2.8		
400	2.0	2.3		
500	2.5	2		
600	3.0	1.8		
700	3.5	1.7		
800	4.0	1.6		

## **Product Details**<sup>†</sup>

DIMENSION A	DIMENSION B	DIMENSION C <sup>®</sup>	DIMENSION D	TIM⁺	FINISH
45	45	14.5	N/A	C675	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 height of the heat sink shown above

and does not include the height of the attachment method



