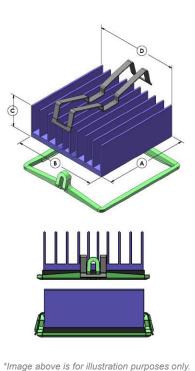
# High Performance BGA Cooling Solutions with superGRIP™ Attachment



## ATS PART # ATS-X53170G-C1-R0

#### **Features & Benefits**

- » Designed for 17 x 17 mm BGA components
- » superGRIP<sup>™</sup> super strong, uniform attachment force helps achieve maximum performance from phase-changing TIM and does not require holes in the PCB
- » Allows the heat sink to be detached and reattached without damaging the component and/or the PCB, an important feature in the event a PCB may need to be reworked
- » Meets Telcordia GR-63-Core Office Vibration, ETSI 300 019 Transportation Vibration, and MIL-STD-810 Shock Testing and Unpackaged Drop Testing standards
- » Requires minimal space around the component's perimeter; ideal for densely populated PCBs
- » "Keep-Out" Requirements: An "Un-Populated" boarder zone of 3 mm around the component is necessary to facilitate the Installation/Removal of the superGRIP™. Please refer to the superGRIP™ Keep-Out Guidelines and superGRIP™ Installation/Removal Instructions for further details



### **Thermal Performance**

AIR VELOCITY		THERMAL RESISTANCE		
M/S	°C/W (UNDUCTED FLOW)	°C/W (DUCTED FLOW)		
1.0	13.1	7.8		
1.5	10.4			
2.0	9.0			
2.5	8.1			
3.0	7.4			
3.5	6.9			
4.0	6.5			
	M/S 1.0 1.5 2.0 2.5 3.0 3.5	M/S °C/W (UNDUCTED FLOW)   1.0 13.1   1.5 10.4   2.0 9.0   2.5 8.1   3.0 7.4   3.5 6.9		

### **Product Details**

DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	INTERFACE MATERIAL	FINISH
17 mm	17 mm	12.5 mm	17 mm	CHOMERICS T-766	<b>BLUE ANODIZED</b>

#### NOTES:

1) DIMENSIONS ARE MEASURED IN MILLIMETERS

2) DIMENSIONS A & B REFER TO COMPONENT SIZE

3) DIMENSION C = THE HEIGHT OF THE HEAT SINK SHOWN ABOVE AND DOES NOT INCLUDE THE HEIGHT OF THE ATTACHMENT METHOD

4) ATS RESERVES THE RIGHT TO UPDATE OR CHANGE IT PRODUCTS WITHOUT NOTICE

5) CONTACT ATS TO LEARN ABOUT CUSTOM OPTIONS AVAILABLE



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).