

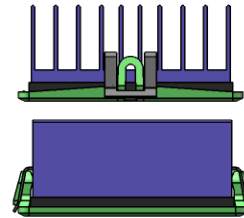


# High Performance BGA Cooling Solutions with superGRIP™ Attachment

**ATS PART # ATS-X53450P-C1-R0**

## Features & Benefits

- » Designed for 45 x 45 mm BGA components
- » superGRIP™ 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
- » Eliminates the need to drill mounting holes in the PCB
- » “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



*\*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	2.8	1.6
300	1.5	2.1	
400	2.0	1.8	
500	2.5	1.6	
600	3.0	1.4	
700	3.5	1.3	
800	4.0	1.3	

## Product Details

DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	INTERFACE MATERIAL	FINISH
45 mm	45 mm	17.5 mm	45 mm	CHOMERICS T-766	BLUE ANODIZED

### 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



**ATS** ADVANCED THERMAL SOLUTIONS, INC.  
Innovations in Thermal Management®

**For more information, to find a distributor or to place an order, visit [www.qats.com](http://www.qats.com) or call: 781.769.2800 (North America); +31 (0) 3569 84715 (Europe).**

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Heat Sinks](#) category:*

*Click to view products by [Advanced Thermal Solutions](#) manufacturer:*

Other Similar products are found below :

[581102B00000G](#) [630-35ABT3](#) [656-15ABPE](#) [657-20ABPNE](#) [73452PPBA](#) [7721-13NG](#) [7G0011A](#) [FI306/SE](#) [PF720G](#) [A22-4026](#) [120-1873-007](#) [HAH10L](#) [1542256-2](#) [1542026-1](#) [1542616-1](#) [HS-2506-F1](#) [HS-87M0-F2](#) [218-40CTE3](#) [25-7520](#) [188854F00000G](#) [F-QB-F1](#) [APA501-60-003](#) [253-122ABE-22](#) [PSC22CB](#) [CLP-201](#) [CLP212SG](#) [CLP-7701G](#) [HAA072](#) [HAA083](#) [HAF10L](#) [HAQ10T](#) [D10100-28](#) [TO5-002D](#) [513101B02500G](#) [BDN183CBA01](#) [531202B0000](#) [HS-56M0-C1](#) [3-21053-4](#) [TX0506-1B](#) [TX1806B](#) [336614B-00000](#) [V2004X](#) [LAE66A3CB](#) [WA-DT2-101E](#) [511-3U](#) [017177](#) [530510B00000G](#) [6110BG](#) [73381PPBA](#) [73403PPBA](#)