# BGA Heat Sink - High Performance fanSINK™ with maxiGRIP<sup>™</sup> Attachment





ATS Part#: **Description:** 

Heat Sink Type:

#### ATS-61450R-C1-R0

45.00 x 45.00 x 19.50 mm BGA Heat Sink - High Performance fanSINK<sup>™</sup> with maxiGRIP<sup>™</sup> Attachment fanSINK

#### Features & Benefits

- » X-Cut straightFIN heatsink fins offer omnidirectional air flow for optimum thermal performance independent of PCB lay-out
- » Stainless steel screw fan attachment ensures dependable long-term fan to heat sink assembly. 4-40 thread screws are supplied in 4 lengths (1/2", 3/4", 7/8", 1"). Contact ATS for custom options available.
- » Product hole pattern is 20 mm C-C (center to center)
- » Component Attachment: ATS maxiGRIP™ is a proven high reliability mechanical attachment system

Heat Sink Attachment: maxiGRIP Equivalent Part Number: N/A

- » Meets Telecordia GR-63-Core Office Vibration; ETSI 300 019 Transportation Vibration; and MIL-STD-810 Shock Testing and Unpackaged Drop Testing Standards
- » maxiGRIP™ hardware includes a high performance plastic frame clip and 300 Series stainless steel spring clip-avoiding PCB through holes
- » Provided with pre-assembled Thermal Interface Material (TIM) centered on base
- » "Keep-Out" Requirements: An "Un-Populated" boarder zone of 5mm around the component is necessary to facilitate the installation/removal of the maxiGRIP™. Please refer to the maxiGRIP™ Keep-Out Guidelines and Installation/Removal Instructions for further details

Thermal Performance								
AIR VELOCITY		@200 LFM 1.0 M/S	@300 LFM 1.5 M/S	@400 LFM 2.0 M/S	@500 LFM 2.5 M/S	@600 LFM 3.0 M/S	@700 LFM 3.5 M/S	@800 LFM 4.0 M/S
THERMAL RESISTANCE	Unducted Flow	1.40	N/A	N/A	N/A	N/A	N/A	N/A
	Ducted Flow	0.00	N/A	N/A	N/A	N/A	N/A	N/A

### Suggested Fan (Not Included)

Manufacturer	Part #	Voltage	Dimensions (mm) L x H X W	Airflow	
Sunon	ME45100V1-000U-A99	5VDC	45 x 45 x 10	11.0 CFM (0.308m <sup>3</sup> /min)	
Sunon	ME45101V1-000U-A99	12VDC	45 x 45 x 10	11.8 CFM (0.330m <sup>3</sup> /min)	

## **Product Details**

SCHEMATIC IMAGE	Dimension A	Dimension B	Dimension C	Dimension D	ТІМ	Finish
Ĩ	44.25	44.25	19.5	32	Chomerics T412	Black
All Images are for illustration p	1) 2) 3) 4) 5) 6) 7)	independently so Dimension A and Dimension C is tl Thermal perform application. ATS reserves the performance. ATS certifies that	urced. B refer to componer ne heat sink height fr ance data are provid	nt size. rom the bottom of the ed for reference only nange its products w nbly is RoHS-6 and f	er requirements and nee e base to the top of the fi /. Actual performance ma ithout notice to improve t REACH compliant.	n field. ay vary by

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For further technical information, please contact Advanced Thermal Solutions, Inc. 89-27 ACCESS ROAD, NORWOOD, MA 02062 USA | T: 781.769. 2800 F: 781.769.9979 | WWW.QATS.COM