

# BGA Heat Sink - High Performance Straight Fin w/Thermal Tape



ATS Part#: **ATS-54450W-C1-R0**  
 Description: 45.00 x 45.00 x 24.50 mm BGA Heat Sink - High Performance Straight Fin w/Thermal Tape

Heat Sink Type: **Straight Fin**  
 Heat Sink Attachment: **Thermal Tape**  
 Equivalent Part Number: **ATS-54450W-C2-R0**

*\*Image above is for illustration purpose only.*

## Features & Benefits

- High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments
- Designed specifically for BGAs and other surface mount packages
- Comes preassembled with high performance thermal interface material

## Thermal Performance

| AIR VELOCITY       |               | @200 LFM<br>1.0 M/S | @300 LFM<br>1.5 M/S | @400 LFM<br>2.0 M/S | @500 LFM<br>2.5 M/S | @600 LFM<br>3.0 M/S | @700 LFM<br>3.5 M/S | @800 LFM<br>4.0 M/S |
|--------------------|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| THERMAL RESISTANCE | Unducted Flow | 2.1 °C/W            | 1.6 °C/W            | 1.4 °C/W            | 1.2 °C/W            | 1.1 °C/W            | 1 °C/W              | 1 °C/W              |
|                    | Ducted Flow   | 1.3                 | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 |

## Product Detail

| Schematic Image                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Dimension A | Dimension B | Dimension C | Dimension D | TIM  | Finish         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|------|----------------|
| <p><i>*Image above is for illustration purpose only.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 45.00 mm    | 45.00 mm    | 24.50 mm    | N/A mm      | T412 | BLACK-ANODIZED |
| <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Dimension <b>A</b> and <b>B</b> refer to component size.</li> <li>• Dimension <b>C</b> is the heat sink height from the bottom of the base to the top of the fin field.</li> <li>• ATS-54450W-C2-R0 is the exact heat sink assembly with an equivalent thermal interface material (Saint-Gobain C675).</li> <li>• Thermal performance data are provided for reference only. Actual performance may vary by application.</li> <li>• ATS reserves the right to update or change its products without notice to improve the design or performance.</li> <li>• ATS certifies that this heat sink assembly is RoHS-6 and REACH compliant.</li> <li>• Contact ATS to learn about custom options available.</li> </ul> |             |             |             |             |      |                |

For more information, to find a distributor or to place an order, please contact us at 781-769-2800 (North America), [sales@qats.com](mailto:sales@qats.com) or [www.qats.com](http://www.qats.com).

© 2013 Advanced Thermal Solutions, Inc. | 89-27 Access Road | Norwood MA | 02062 | USA



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