

# BGA Heat Sink (High Aspect Ratio Ext.) Straight Fin



ATS Part#: **ATS019019023-SF-6V**  
 Description: 19.00 x 19.00 x 23.00 mm BGA Heat Sink (High Aspect Ratio Ext.) Straight Fin  
 Heat Sink Type: **Straight Fin**  
 Heat Sink Attachment: **N/A**  
 Equivalent Part Number: **N/A**

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

## Features & Benefits

- High aspect ratio, straight fin heat sinks that are ideal for compact PCB environments
- Fabricated from extruded aluminum, which minimizes thermal resistance from the base to the fins, reduces weight and keeps costs low
- Higher performance helps ensure reliable product life at a lower cost than other extruded heat sinks
- Comes standard without interface material or with most common pressure sensitive thermal tapes as a custom option

## 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 | 5.61 °C/W           | 4.2 °C/W            | 3.6 °C/W            | 3.2 °C/W            | 2.9 °C/W            | 2.7 °C/W            | 2.6 °C/W            |
|                    | Ducted Flow   | 3.5                 | 2.9                 | 2.6                 | 2.4                 | 2.3                 | 2.2                 | 2                   |

## Product Detail

| Schematic Image                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Dimension A | Dimension B | Dimension C | Dimension D | TIM | Finish         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-----|----------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 19.00 mm    | 19.00 mm    | 23.00 mm    | 19 mm       | N/A | BLACK-ANODIZED |
| <b>Notes:</b> <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>• Dimension <b>D</b> is fin tip to fin tip.</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> |             |             |             |             |     |                |

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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).

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