

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



ATS Part#: **ATS040040013-PF-13L**  
 Description: 40.00 x 40.00 x 13.00 mm BGA Heat Sink (High Aspect Ratio Ext.) Custom Pin Fin



Heat Sink Type: Custom Pin Fin  
 Heat Sink Attachment: N/A  
 Equivalent Part Number: N/A

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

## Features & Benefits

- High efficiency pin fin design provides low pressure drop characteristics
- Large surface area increases heat sink performance
- Fabricated from extruded aluminum, which minimizes thermal resistance from the base to the fins, reduces weight and keeps costs low
- Comes standard without interface material or with most common pressure sensitive thermal tapes as a custom option

## 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	4.69 °C/W	3.2 °C/W	2.6 °C/W	2.3 °C/W	2.1 °C/W	1.9 °C/W	1.8 °C/W
	Ducted Flow	2.4	2	1.8	1.6	1.5	1.4	1.3

## 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>	40.00 mm	40.00 mm	13.00 mm	40 mm	N/A	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>• 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>						

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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