ADVANCED THERMAL SOLUTIONS, INC.

THERMAL CHARACTERIZATION REPORT

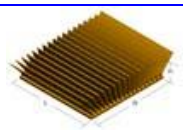
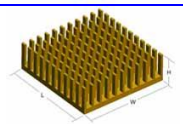
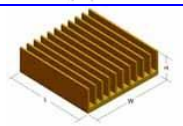
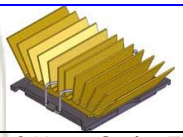
Part No.: [ATS-TI1OP-C1-R1]

Testing Procedure: Thermal characterization is performed per ATS Document No. 7007-R1

THERMAL PERFORMANCE CHART

Air Velocity		Thermal Resistance*
Ft/min	m/s	°C/W
100	0.5	14.3
200	1	8.4
400	2	5.8
600	3	4.8
700	4	4.5

* Thermal data based on unducted flow.

maxiFLOW™		
Pin Fin		
Straight Fin		✓
maxiGRIP™ Configuration**		

** Configuration – consists of Heat Sink, Frame Clip, Spring Clip, and Interface Material (_____) tested with __x __ heat source size.

THERMAL PERFORMANCE EQUATION(S)

$$R_{ca} = 1/(-0.079+0.007*(LnV)^2)$$

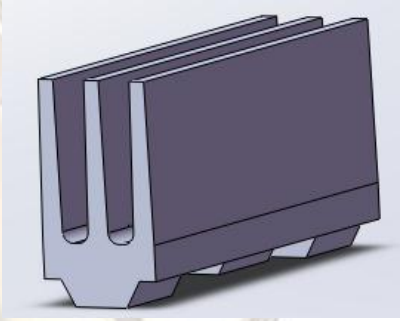
R_{ca} – case-to-ambient thermal resistance, (°C/W)
V – air velocity (ft/min)

Thermal resistance calculation for different die size:

$$R_{ca,spreading} = R_{ca} - 0.7922 + 0.804\left(\frac{A_{DIE}}{A_{Base,HS}}\right)^{-0.156}$$

Note:

1. Calculation is based on an Aluminum heat sink with 2mm base thickness.



Heat Sink Information (mm)	L	W	H
Design Envelope (Overall Dimensions)	50	14	25
Base Size	50	14	7
Weight (gr)			

Configuration Information (mm)	L	W	H
Design Envelope (Overall Dimensions)			
Component Size			
Overall Weight (gr)			