

Surface Mount Heat Sinks For D-PAK, D²PAK, D³PAK, and SO-10



NEW RoHS Compliant

SURFACE MOUNT HEAT SINKS

The Aavid Thermalloy line of low profile surface mount heat sinks are suitable for SMT power semiconductor devices in D-PAK, D²PAK, D³PAK and SO-10 packages. Their unique design removes heat indirectly through conduction without making contact with the SMT device like traditional through hole solutions. The semiconductor's conventional copper drain pad is modified to extend beyond the edges of the semiconductor package providing space to mount the heat sink. The device and heat sink are soldered directly to the modified drain pad creating a thermal transfer path from the package tab to the surface mount heat sink. In addition, the elevated "Wings" of the heat sink provide ample surface area to dissipate the heat into the surrounding environment.







FEATURES AND BENEFITS:

- RoHS compliant 100% matte tin plating with nickel underplate
- No attachment holes required in the printed circuit board
- Wing configuration will not interfere with adjacent components
- · Available in tape and reel packaging for use with automated SMT pick and place equipment
- · Compatible with both tin-lead and lead free (Sn/Ag/Cu) solders

APPLICATIONS:

- Power Supplies
- Telecommunication Equipment
- Motor Controls
- · Medical Equipment
- Industrial Process Control Equipment
- Consumer Products

ORDERING INFORMATION:

| Part Number | Description | Packaging |
|---------------|--|-----------------------|
| 573300D00000G | Surface mount heat sink for TO-263 | Bulk 500 per bag |
| 573300D00010G | Surface mount heat sink for TO-263 | 13" Reel 250/per reel |
| 573400D00000G | Surface mount heat sink for TO-268 | Bulk 500 per bag |
| 573400D00010G | Surface mount heat sink for TO-268 | 13" Reel 250/per reel |
| 573100D00000G | Surface mount heat sink for TO-252 | Bulk 500 per bag |
| 573100D00010G | Surface mount heat sink for TO-252 | 13" Reel 250/per reel |
| 7106DG | Surface mount heat sink for TO-263 | Bulk 500 per bag |
| 7106D/TRG | Surface mount heat sink for SO-10 / Power SO-10 / TO-263 | 13" Reel 200/per reel |
| 7109DG | Surface mount heat sink for SO-10 / Power SO-10 / TO-263 | Bulk 500 per bag |
| 7109D/TRG | Surface mount heat sink for TO-263 | 13" Reel 125/per reel |

FOR MORE INFORMATION, VISIT OUR WEB SITE: WWW. AAVIDTHERMALLOY.COM

TEL: (603) 224-9988

Surface Mount Heat Sinks

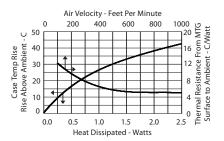
for D²PAK, SO-10 and Power SO-10™ Packages

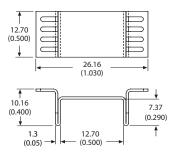


Part Number 573300

Heat Sink for D²PAK (TO-263)





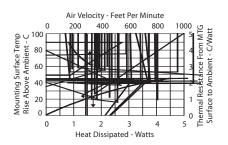


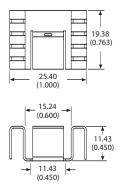
Refer to Figures A and B on back page for device footprint information

Part Number 7109

Heat Sink for D2PAK (TO-263)





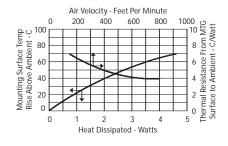


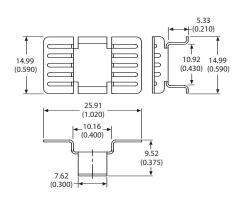
Refer to Figure D on back page for device footprint information

Part Number 7106

Heat Sink for D²PAK (TO-263), SO-10, and Power SO-10[™] (MO-184)







Refer to Figure C on back page for device footprint information

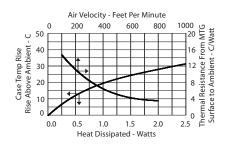
Surface Mount Heat Sinks

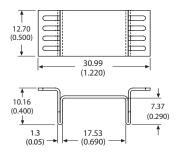
for D-PAK and D³PAK Packages



Part Number 573400 Heat Sink for D³PAK (TO-268)



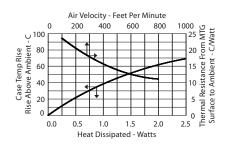


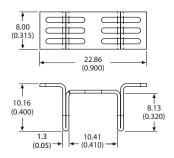


Refer to Figures A and B on back page for device footprint information

Part Number 573100 Heat Sink for D-PAK (TO-252)





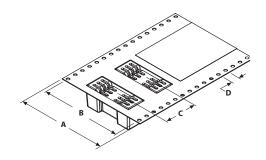


Refer to Figures A and B on back page for device footprint information

Tape and Reel Information



| PART NUMBER | "A" | "B" | "C" | "D" |
|---------------|-------------|-------------|-------------|------------|
| 7106D/TRG | 44.0 (1.73) | 40.4 (1.59) | 24.0 (0.94) | 4.0 (0.16) |
| 7109D/TRG | 44.0 (1.73) | 40.4 (1.59) | 36.0 (1.42) | 4.0 (0.16) |
| 573100D00010G | 44.0 (1.73) | 40.4 (1.59) | 16.0 (0.63) | 4.0 (0.16) |
| 573300D00010G | 44.0 (1.73) | 40.4 (1.59) | 24.0 (0.94) | 4.0 (0.16) |
| 573400D00010G | 44.0 (1.73) | 40.4 (1.59) | 24.0 (0.94) | 4.0 (0.16) |



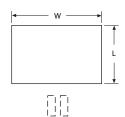
Heat Sink Mounting Footprints



FIGURE A

Recommended Copper Heat Speader Drain Pad Footprint

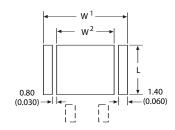
Note: The thickness of the drain pad is variable depending on the amount of heat generated by the SMT device, design, limitations and process.



| Part No. | "L" | "W" |
|----------|---------------|---------------|
| 573100 | 9.53 (0.375) | 13.97 (0.550) |
| 573300 | 14.22 (0.560) | 16.26 (0.640) |
| 573400 | 14.22 (0.560) | 21.08 (0.830) |

FIGURE B

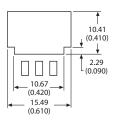
Recommended Heat Sink Solder Mask Opening



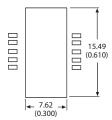
| Part No. | "L" | "W1" | "W2" |
|----------|---------------|---------------|---------------|
| 573100 | 9.02 (0.355) | 13.46 (0.530) | 8.89 (0.350) |
| 573300 | 13.72 (0.540) | 15.75 (0.620) | 11.18 (0.440) |
| 573400 | 13.72 (0.540) | 20.57 (0.810) | 16.00 (0.630) |

FIGURE C

Recommended Copper Pad Size for Heat Sink and Device Mounting Footprint



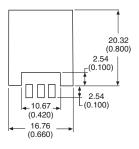




For MO-184 and SO-10

FIGURE D

Recommended Copper Pad Size for Heat Sink and Device Mounting Footprint



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