

# **Surface Mount Heat Sinks** For D-PAK, D<sup>2</sup>PAK, D<sup>3</sup>PAK, 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 SO-10 / Power SO-10 / 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 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

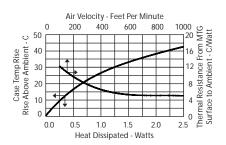
# **Surface Mount Heat Sinks**

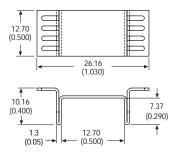
for D<sup>2</sup>PAK, SO-10 and Power SO-10<sup>™</sup> Packages



# Part Number 573300 Heat Sink for D<sup>2</sup>PAK (TO-263)





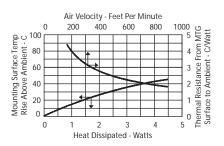


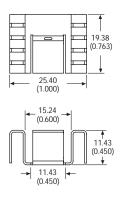
Refer to Figures A and B on back page for device footprint information

# Part Number 7109

Heat Sink for D2PAK (TO-263)





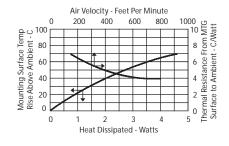


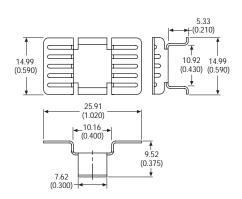
Refer to Figure D on back page for device footprint information

# Part Number 7106

Heat Sink for D<sup>2</sup>PAK (TO-263), SO-10, and Power SO-10<sup>™</sup> (MO-184)







Refer to Figure C on back page for device footprint information

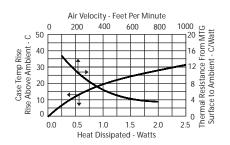
# **Surface Mount Heat Sinks**

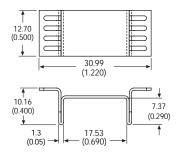
for D-PAK and D<sup>3</sup>PAK Packages



# Part Number 573400 Heat Sink for D<sup>3</sup>PAK (TO-268)



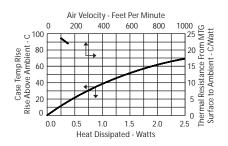


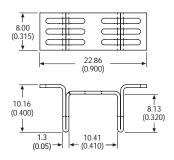


Refer to Figures A and B on back page for device footprint information

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





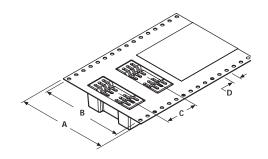


Refer to Figures A and B on back page for device footprint information

# **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)



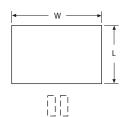
# **Heat Sink Mounting Footprints**



# FIGURE A

Recommended Copper Heat Speader Drain Pad Footprint

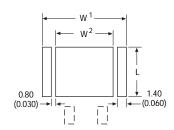
Note: The thickness of the drain pad is variable depending on the amount of heat generated by the SMT device, design, limitations and process.



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

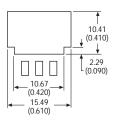
Recommended Heat Sink Solder Mask Opening



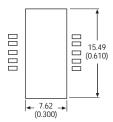
Part No.	"L"	"W1"	"W2"
573100	9.02 (0.355)	13.46 (0.530)	8.89 (0.350)
573300	13.72 (0.540)	15.75 (0.620)	11.18 (0.440)
573400	13.72 (0.540)	20.57 (0.810)	16.00 (0.630)

#### FIGURE C

Recommended Copper Pad Size for Heat Sink and Device Mounting Footprint



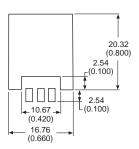
For D Pak (TO-263)



For MO-184 and SO-10

# FIGURE D

Recommended Copper Pad Size for Heat Sink and Device Mounting Footprint



#### **North America**

70 Commercial Street Concord, NH 03301 TEL: (603) 224-9988 FAX: (603) 223-1790

#### **Europe - Italy**

Via Aprile,32 40057 Cadriano (BO), Italy TEL: (39) 051 764011 FAX: (39) 051 764090

# Asia - Taiwan

14F-4, NO. 79, Hsin Tai Wu RD. SEC. 1, Hsi Chih Taipei Hsien Taiwan TEL: 011(886) 2–2698–9888 FAX: 011(886) 2–2698–9808

#### Asia - Singapore

5 Woodlands Industrial Park E1 Singapore 757728 TEL: 65 –6362–8388 FAX: 65–6362–8588

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