

# HEATSINKS



A heat sink is a mass of thermally conductive material used to dissipate heat away from a device into the surrounding air. Heat sink designs include fins or other protrusions to increase the surface area; this increases its ability to remove heat from the device. When dealing with parts in a heat sinkable package such as a TO-220 or TO-247, it is necessary to use a proper heat sink to achieve the wattage dissipation required in the application. Ohmite has designed and tested many heat sinks and now offers heat sink designs for use with common industry packages.

The unique design (pat pending) of the W series heat sinks combines a tin plated, solderable, integrated spring clip with an aluminum heat sink body for an all in one solution. The mounting clip provides consistent pressure to reduce thermal resistance.

Providing design flexibility is the M series. This series can be scaled to meet the designer's power dissipation needs. The M series is designed for TO-247 and TO-264 packages and can hold multiple devices. This aluminum heat sink provides the largest surface area, easiest assembly and smallest footprint. It is ideal for high density and forced convection cooling.

The Ohmite D series has a truly innovative design. The aluminum extrusion combined with solderable rollers increases thermal performance and surface area over similar stamped designs. The D series is designed for popular TO-252, TO-263, and TO-268 packages.

**Black anodized or standard?**

Two physics laws (Plancks law, Stefan-Boltzmann law) used in conjunction mathematically prove that a black body radiates heat more efficiently. Basically, a black anodized heat sink will perform better in a convection cooled application. When forced air is used this effect no longer becomes significant and the parts will perform identically.



# HEATSINK GUIDE

Ohmite Heat Sink Series	Height in/mm	For Package Type	Ohmite Resistor Series	Surface Area in <sup>2</sup> / mm <sup>2</sup>	Weight	Thermal Resistance (°C/W)
RA-2TX-25E	1.0/25.4	TO-220, -218, -247	TBH25, TCH 35 TEH70, TEH100	13.71/8901	0.88/25	4.8
RA-2TX-38E	1.5/38.1	TO-220, -218, -247	TBH25, TCH 35 TEH70, TEH100	20.12/12983	1.34/38	3.9
RA-2TX-51E	2.0/50.8	TO-220, -218, -247	TBH25, TCH 35 TEH70, TEH100	26.45/17065	1.80/51	3.5
RA-2TX-64E	2.5/63.5	TO-220, -218, -247	TBH25, TCH 35 TEH70, TEH100	32.77/21148	2.22/63	3.1

R Series

FA-T220-25E	1.0/25.4	TO-220	TBH25, TCH 35	13.39/9285	0.63/18	4.7
FA-T220-38E	1.5/38.1	TO-220	TBH25, TCH 35	21.32/13756	0.95/27	3.9
FA-T220-51E	2.0/50.8	TO-220	TBH25, TCH 35	26.45/17065	1.31/37	3.4
FA-T220-64E	2.5/63.5	TO-220	TBH25, TCH 35	35.36/22814	1.62/46	3

F Series

MV-102-55E	1.52/38.6	TO-220, -218, -247	TCH20,TBH25, TCH 35 TEH70, TEH100	45/29032	2.2/63	5.8
MA-102-55E	1.52/38.6	TO-220, -218, -247	TCH20,TBH25, TCH 35 TEH70, TEH100	45/29032	2.2/63	5.2

M Series

EV-T220-38E	1.5/38.1	TO-220	TBH25, TCH 35	11.5/7419	0.63/18	11.4
EA-T220-38E						9.5
EV-T220-51E	2.0/50.8	TO-220	TBH25, TCH 35	15.2/9806	0.85/24	9
EA-T220-51E						7.5
EV-T220-64E	2.5/63.5	TO-220	TBH25, TCH 35	18.8/12129	1.06/30	7.4
EA-T220-64E						6.2

E Series

DV-T263-101E	0.4/10.16	TO-262, TO-263	TDH 35	N/A	0.13/3.8	N/A
DA-T263-101E	0.4/10.16	TO-262, TO-263	TDH 35	N/A	0.13/3.8	N/A
DV-T268-101E	0.4/10.16	TO-268	N/A	N/A	0.14/4.1	N/A
DA-T268-101E	0.4/10.16	TO-268	N/A	N/A	0.14/4.1	N/A

E Series

WA-T220-101E	1.2/30.5	TO-220	TBH25, TCH 35	6.5/4193	0.35/10	12
WV-T220-101E	1.2/30.5					13
WA-T247-101E	1.26/32	TO-247	TEH70, TEH 100	8.4/5419	0.42/12	11
WV-T247-101E	1.26/32					12

D Series

WA-DT2-101E	1.26/32	TO-220 & TO-247	TBH25, TCH 35 TEH70, TEH 100	15.1/9741	0.78/22	7
WV-DT2-101E	1.26/32					8

W Series



Review data sheet for full specifications

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