

# M Series Heatsinks

Heatsink with clips for TO-264 and TO-247



Ohmite introduces the M series, patented (Pat. No. 7,151,669), high performance, low cost, configurable, scalable and compact heat sink with matrix clip system for TO-247 and TO-264 packages. This powerful heat sink provides the easiest assembly, largest surface area and smallest footprint. It is the ideal type of heat sink for high power density and small size (1U or 2U) electronic packaging with forced convection cooling.

## FEATURES

- Minimum assembly cost and labor. Spring Clips make the mounting holes and fasteners obsolete in assembly operations & reduce costs.
- Maximum Thermal Transfer. Maximum surface area per unit volume, efficient cooling fins & consistent mounting force reduces thermal resistance
- Maximum Repeatability. Constant spring force over repeated assembly/disassembly
- Maximum Reliability. Resilient spring action locks electronic component in place. Fewer parts in assembly and no fasteners and washers required. Prevent short circuit by eliminating metal particles generated from hardware or thread tapping
- Design Flexibility. Maximum flexibility for dynamic device locations and power up grading. “Configure-to-Fit” & “Scale-to-Meet” options give designers the total freedom to configure the heat sink to fit their packaging designs and to scale the heat sink to meet their power dissipations.

## SERIES SPECIFICATIONS

Part No.	Surface Area (in <sup>2</sup> /mm <sup>2</sup> )	Weight (oz./g)	Thermal Resistance (°C/w)*
MV-102-55E	45 / 29,097	2.2 / 63	6.0
MA-102-55E	45 / 29,097	2.2 / 63	5.2
MV-101-27E	22 / 14,284	1.1 / 31	9.6
MA-101-27E	22 / 14,284	1.1 / 31	8.0
MV-302-55E	76 / 49,218	4.7 / 134	3.6
MA-302-55E	76 / 49,218	4.7 / 134	3.0
MV-301-27E	37.3 / 24,161	2.3 / 66	5.5
MA-301-27E	37.3 / 24,161	2.3 / 66	4.6

\* R-theta<sub>c-a</sub> for 18W dissipation total for two devices in natural convection

## CHARACTERISTICS

**Heat Sink** Aluminum Alloy 6063-T5 or Equivalent with either degreased or black anodized finish.

**Spring Clip** Music Wire, Per ASTM A228 with bright nickel plating

**Solder Foot** Cold-rolled Steel, Per ASTM A-366 with pure tin over copper strike. RoHS compliant.

**Interface thermal resistance** Thermal joint compound or 0.005 Grafoil (TGon 800 by Laird)

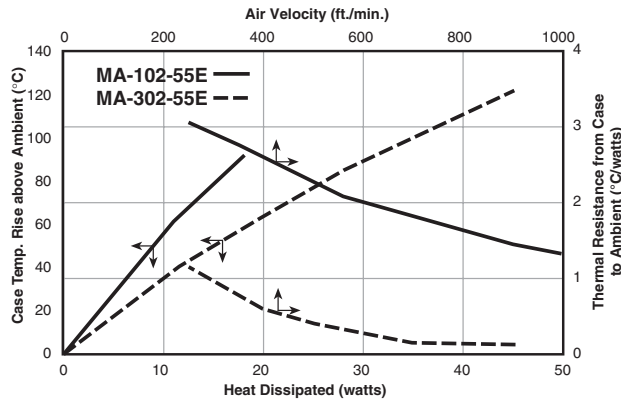
**Interface electrical isolation** Sil-Pad 900S by Bergquist or equivalent

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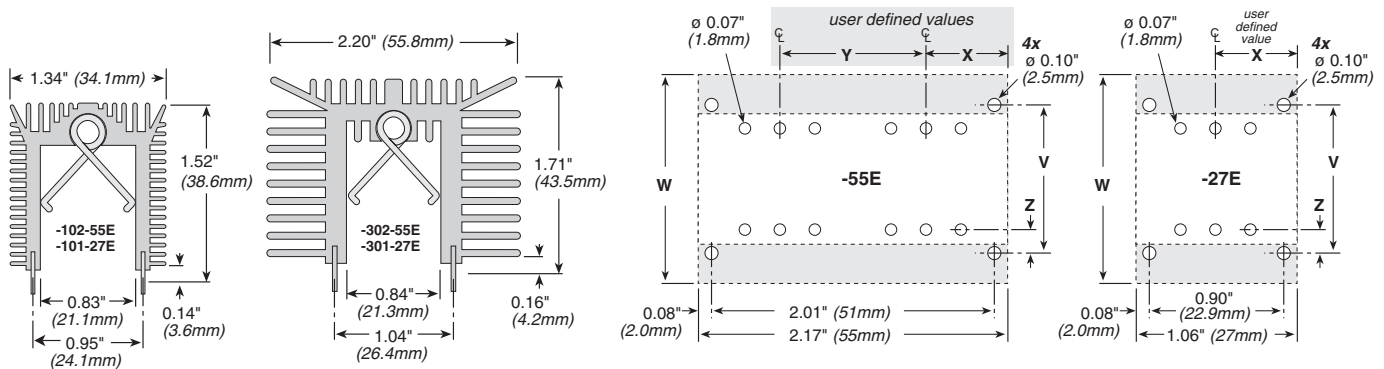
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## HEAT DISSIPATION

For two devices



## DIMENSIONS



Part Number	W	V	Z*
MV-102-55E	1.35" / 34.3	0.95" / 24.1	0.18" / 4.6
MA-102-55E			
MA-101-27E			
MA-101-27E			
MV-302-55E	2.20" / 55.9	1.04" / 26.4	0.21" / 5.3
MA-302-55E			
MA-301-27E			
MA-301-27E			

\*Device package dimensions can vary. Customer should verify this dimension.

## HOW TO ORDER



### Standard Part Numbers

Part Number	Description	Packaging
MV-102-55E	55mm No finish (degreased)	Bulk
MA-102-55E	55mm Black anodized	Bulk
MV-101-27E	27mm No finish (degreased)	Bulk
MA-101-27E	27mm Black anodized	Bulk
MV-302-55E	55mm No finish (degreased)	Bulk
MA-302-55E	55mm Black anodized	Bulk
MV-301-27E	27mm No finish (degreased)	Bulk
MA-301-27E	27mm Black anodized	Bulk