

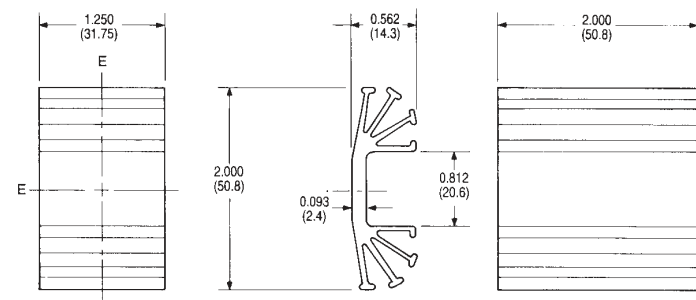
## BOARD LEVEL POWER SEMICONDUCTOR HEAT SINKS

### 601 & 603 SERIES

LOW-HEIGHT HEAT SINKS

DO-4/DO-5 Diodes

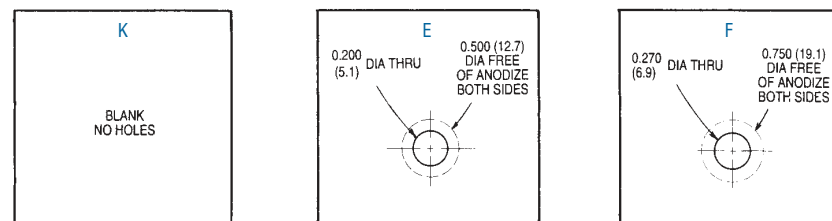
#### MECHANICAL DIMENSIONS



601 SERIES  
(EXTRUSION PROFILE 1284)

603 SERIES  
(EXTRUSION PROFILE 1284)

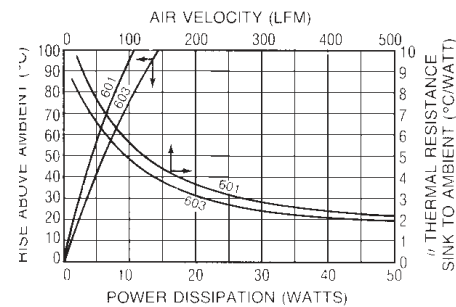
#### SEMICONDUCTOR MOUNTING HOLES



Dimensions: in. (mm)

E&F available on 601 Series only as a standard product.

#### NATURAL AND FORCED CONVECTION CHARACTERISTICS



### MAXIMUM PERFORMANCE NATURAL CONVECTION HEAT SINK FOR ALL METAL-CASE SEMICONDUCTORS

TO-3

### 641 SERIES

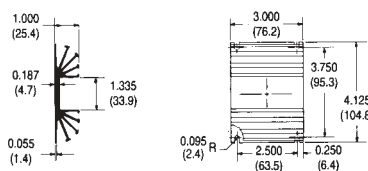
Available with a standard TO-3 mounting hole pattern predrilled for cost-effective mounting in limited-height applications, the **641 Series** provides maximum performance in natural convection with an optimized heat sink surface area. The 641K type with an open channel area of 1.300 in. (33.0) and no predrilled mounting holes can be adapted to meet mounting requirements for most metal case power semiconductor types.

Standard P/N	Outline Dimensions in. (mm)	Height in. (mm)	Mounting Hole Pattern	Thermal Performance at Typical Load		Weight lbs. (grams)
				Natural Convection	Forced Convection	
641A	4.125 (104.8) x 3.000 (76.2)	1.000 (25.4)	(1) TO-3	36°C @ 15W	0.9°C/W @ 250 LFM	0.2900 (131.54)
641K	4.125 (104.8) x 3.000 (76.2)	1.000 (25.4)	None	36°C @ 15W	0.9°C/W @ 250 LFM	0.2900 (131.54)

Material: Aluminum Alloy, Black Anodized.

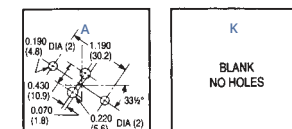
#### MECHANICAL DIMENSIONS

641 SERIES  
(EXTRUSION PROFILE 1371)

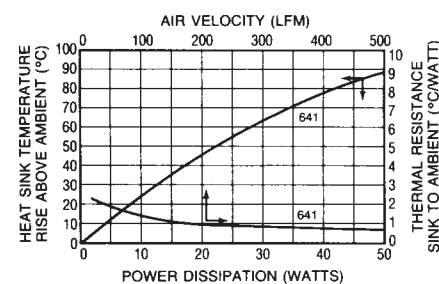


Dimensions: in. (mm)

#### SEMICONDUCTOR MOUNTING HOLES



#### NATURAL AND FORCED CONVECTION CHARACTERISTICS



## UNIVERSAL 678 SERIES VERTICAL HEAT SINK FOR POWER DEVICES

### 678-39-S & 678-39-C



Wakefield-Vette introduces **Universal 678 series**, high performance, low cost and versatile heat sink with screw or clip for all kinds of standard packages. This type of heat sink provides both vertical and horizontal mounting options on PCB to accommodate natural and forced convection cooling method.

#### SPECIFICATIONS

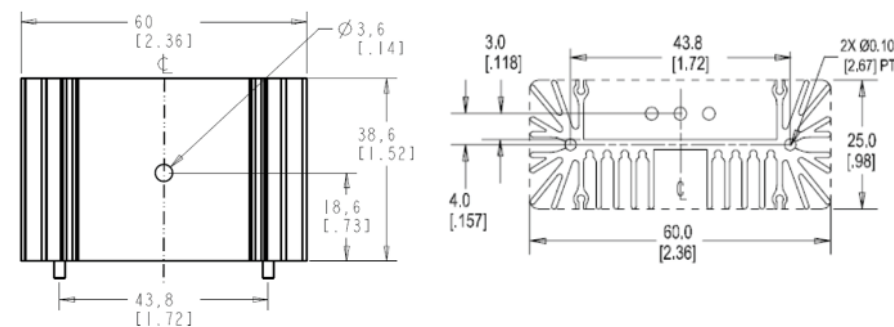
- **Heat Sink:** Aluminum Alloy 6063-T5 or Equivalent with either degreased or black anodized finish
- **Spring Clip:** Music Wire, Per ASTM A228 with bright nickel plating
- **Solder Foot:** Cold-rolled Steel, Per ASTM A-366 with pure tin over copper strike. RoHS compliant.
- **Insulator (Optional):** t-Global H48-1, L37-3F and H48-6S. The thickness of the insulating material not to exceed 10 mil (0.01").

#### FEATURES AND BENEFITS

- **Minimum assembly cost and labor** - Spring Clips make the mounting holes and fasteners obsolete in assembly operations & reduce costs.
- **Design Flexibility** - Universal mountable and "one fits all" give designers total freedom to fit their packaging designs with ideal device pack style and to orient the heat sink to meet their power dissipations with optimized cooling method. (see page 7 of data sheet).

Part Number	Description	Length	Width	Thermal Resistance @ Forced Air Flow
678-39-S	Universal Heat Sink for TO Devices w/Screw Hole, Black Anodize	1.520" (38.61mm)	2.362" (60.00mm)	0.6°C/W @ 600 LFM
678-39-C	Universal Heat Sink for TO Devices w/ Clip, Black Anodize	1.520" (38.61mm)	2.362" (60.00mm)	0.6°C/W @ 600 LFM

#### MECHANICAL DIMENSIONS



#### THERMAL PERFORMANCE

