

EXTRUDED HEAT SINKS FOR POWER SEMICONDUCTORS

465 & 476 SERIES

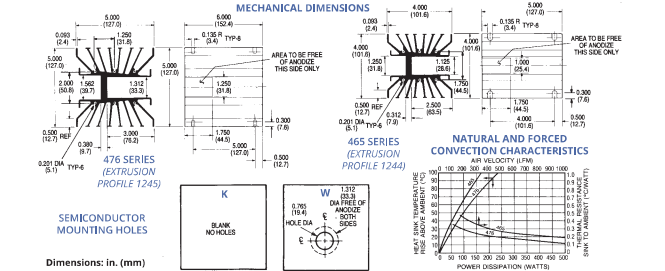
HIGH-POWER HEAT SINKS FOR MEDIUM
HEX-TYPE RECTIFIERS AND DIODES

Stud-Mount

Wakefield-Vette Engineering has designed four standard heat sink types for ease of installation and efficient heat dissipation for industry standard hex-type rectifiers and similar stud-mount power devices: 465, 476, 486, and 489 Series. The 465 and 476 Series shown here are designed for 1.060 in. Hex (465 Type) and 1.250 in. Hex (476 Type). The 476W Type is available pre-drilled for an 0.765 in. (19.4) dia.

Standard P/N	Nominal Dimensions			Hex Style Type	Mounting Hole Pattern	Thermal Performance at Typical Load		Weight lbs. (grams)
	Width in. (mm)	Length in. (mm)	Height in. (mm)			Natural Convection	Forced Convection	
465K	4.000 (101.6)	5.000 (127.0)	4.000 (101.6)	1.060 in. Hex	None	38°C @ 50W	0.27°C/W @ 500 LFM	1.9300 (875.45)
476K	5.000 (127.0)	6.000 (152.4)	5.000 (127.0)	1.250 in. Hex	None	25°C @ 50W	0.19°C/W @ 500 LFM	2.8200 (1279.15)
476W	5.000 (127.0)	6.000 (152.4)	5.000 (127.0)	1.250 in. Hex	0.765 in. (19.4) Dia. Center Mount	25°C @ 50W	0.19°C/W @ 500 LFM	2.8000 (1270.08)

Material: Aluminum Alloy, Black Anodized



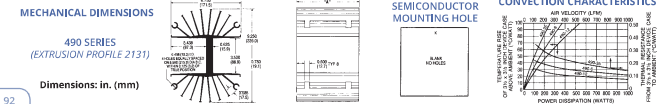
General Purpose

KING SIZE HEAT SINKS FOR
HIGH-POWER RECTIFIERS 490 SERIES

The 490 Series can be used to mount a single high-power rectifier or a grouping of smaller power devices. The semiconductor device mounting surface is free of anodize on the entire surface on one side only; finish overall is black anodize. Use Type 109 mounting brackets (see accessories section) for mounting to enclosure wall and for electrical isolation. The anodize-free mounting surface is milled for maximum contact area. The 490 Series Can also be drilled for mounting and cooling IGBTs and other isolated power modules.

Standard P/N	Nominal Dimensions			Semiconductor Mounting Hole Pattern	Thermal Performance at Typical Load		Weight lbs. (grams)
	Width in. (mm)	Length "A" in. (mm)	Height in. (mm)		Natural Convection	Forced Convection	
490-25K	9.250 (235.0)	3.500 (88.9)	6.750 (171.5)	None	84°C @ 200W	0.18°C/W @ 500 LFM	3.2400 (1469.66)
490-6K	9.250 (235.0)	6.000 (152.4)	6.750 (171.5)	None	60°C @ 200W	0.13°C/W @ 600 LFM	5.4700 (2481.19)
490-12K	9.250 (235.0)	12.000 (304.8)	6.750 (171.5)	None	45°C @ 200W	0.09°C/W @ 600 LFM	10.6200 (4817.23)

Material: Aluminum Alloy, Black Anodized



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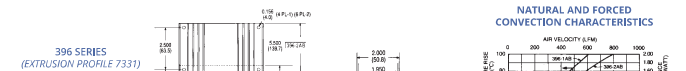
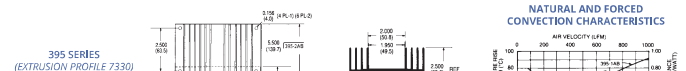
PERFORMANCE, LOW PROFILE HEAT SINKS FOR
POWER MODULES & IGBT'S

394, 395, & 396 SERIES



Standard P/N	Overall Dimensions: in. (mm)			Device Base Mounting Area (mm)	Base Mounting Holes	Thermal Resistance at Typical Load	
	Length in. (mm)	Height in. (mm)	Width in. (mm)			Natural Convection (0.5a) ¹ (°C/W)	Forced Convection (0.5a) (°C/W @ 500 LFM)
394-1AB	3.000 (76.2)	1.500 (38.1)	5.000 (127.0)	101 x 76	4	1.85	0.80
394-2AB	5.500 (139.7)	1.500 (38.1)	5.000 (127.0)	101 x 76	6	1.51	0.60
394-1AB	3.000 (76.2)	2.500 (63.5)	5.000 (127.0)	50 x 76	4	1.10	0.50
395-2AB	5.500 (139.7)	2.500 (63.5)	5.000 (127.0)	50 x 76	6	0.90	0.32
396-1AB	3.000 (76.2)	1.380 (35.1)	5.000 (127.0)	50 x 76	4	1.85	1.07
396-2AB	5.500 (139.7)	1.380 (35.1)	5.000 (127.0)	50 x 76	6	1.51	0.64

Note: 1. Thermal resistance values shown are for black anodized finish at 50°C rise above ambient.



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