

HEAT SINK COOLING FOR IGBT MODULES

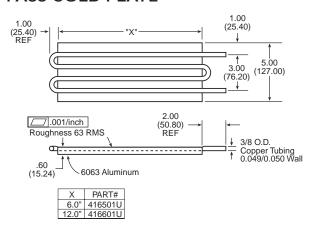
Aavid offers several methods for cooling IGBT modules - cold plates, extruded aluminum heat sinks, bonded fin heat sinks, and fan cooled modules.

6-pass liquid-cooled cold plates offer optimum thermal management for high power IGBT modules. They are ideal for use in stationary or mobile applications requiring high power dissipation and low thermal resistance - welding, plasma, UPS/power supplies, and motor controls in traction and electric vehicles.

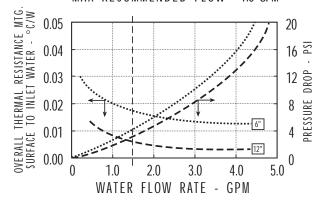
FEATURES:

- · Maximizes cooling in a compact package
- · Fits all standard IGBT module sizes
- Maintains uniform temperature under devices
- Available in multiple lengths for single and threephase design

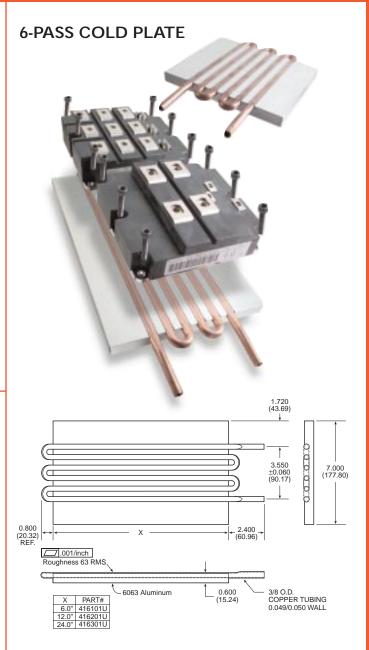
4-PASS COLD PLATE

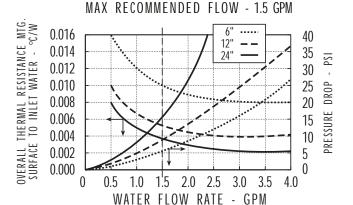


MAX RECOMMENDED FLOW - 1.5 GPM



NOTES: THERMAL RESISTANCE BASED ON WATER, IF 50/50 WATER GLYCOL MIXTURE IS USED INCREASE THERMAL RESISTANCES BY 12% THERMAL RESISTANCES SHOWN ARE FROM INLET WATER TEMPERATURE TO MOUNTING SURFACE HOT SPOTS

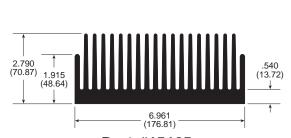




NOTES: THERMAL RESISTANCE BASED ON WATER, IF 50/50 WATER GLYCOL MIXTURE IS USED INCREASE THERMAL RESISTANCES BY 12%

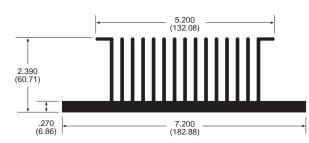
THERMAL RESISTANCES SHOWN ARE FROM INLET WATER TEMPERATURE TO MOUNTING SURFACE HOT SPOTS

BONDED FIN HEAT SINKS FOR IGBT MODULES



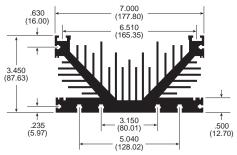
Part #65605

97.9in2/in, 9.3lb/ft, 0.9°C/W/3in



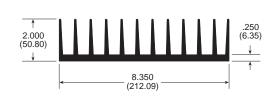
Part #62625

78.2in2/in, 4.7lb/ft, 0.9°C/W/3in



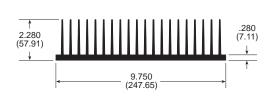
Part #64730

95.2in2/in, 11.0lb/ft, 0.7°C/W/3in



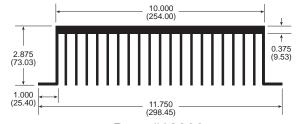
Part #60815

56.8in2/in, 6.0lb/ft, 1.2°C/W/3in



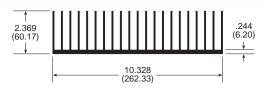
Part #62725

100.1in2/in, 7.1lb/ft, 0.7°C/W/3in



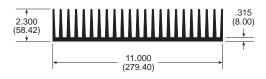
Part #69200

125.5 in2/in,10.2 lb/ft, °C/W/3in



Part #65525

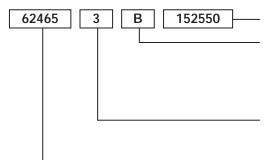
108.9in2/in, 8.1lb/ft, 0.6°C/W/3in



Part #65340

110.4in2/in, 11.8lb/ft, 0.6°C/W/3in

ORDERING INFORMATION: Extruded Part Numbering



Custom length (decimal point between positions 9 and 10)

Finish code: S = Aavgard

C = gold chromate

U = unfinished

B = black anodized

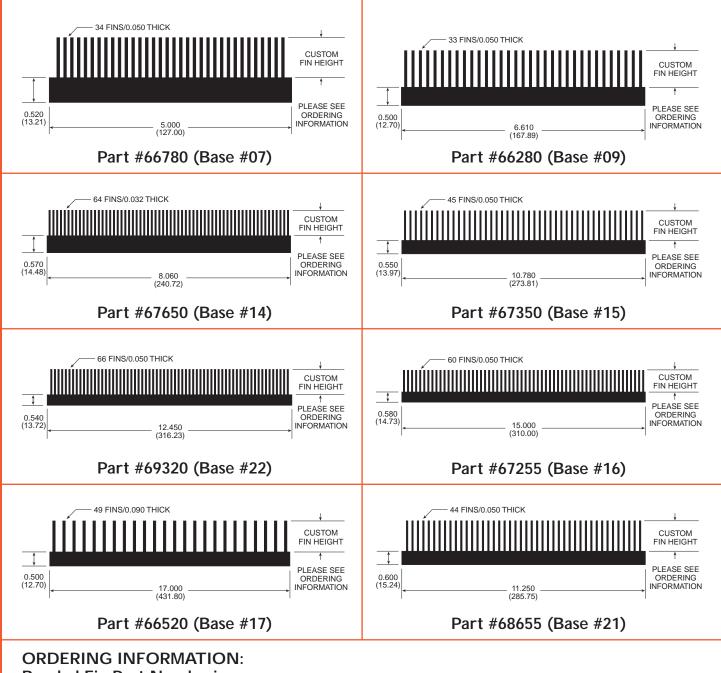
L = clear chromate

Note: If no letter is specified U for unfinished is assumed.

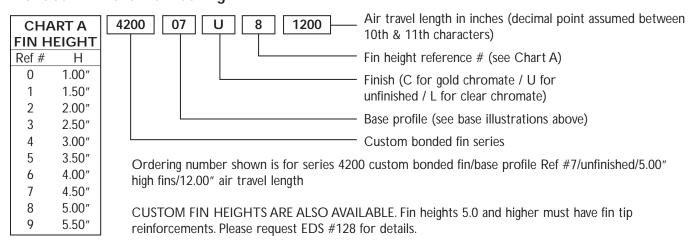
Cut determination ("1" for no cut, stocked typ. 96" length / "2" for stocked length cut in half / "3" for custom length noted in positions 8-12)

Base part #

BONDED FIN HEAT SINKS FOR IGBT MODULES

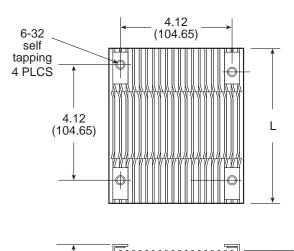


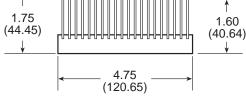
Bonded Fin Part Numbering



STANDARD POLAR CAP COOLERS FOR IGBT MODULES

119 mm COOLING FAN MODELS

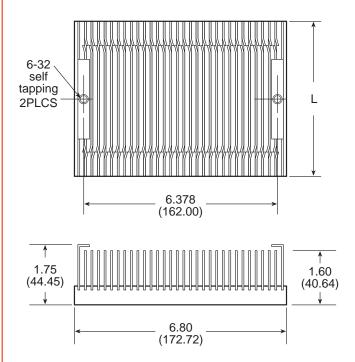




(FAN NOT INCLUDED)

Part #	Length	Thermal Resistance
027440	4.84" (122.9mm)	0.117° C/W
027441	7.12" (180.9mm)	0.084° C/W
027442	9.78" (248.4mm)	0.068° C/W

172 x 150 mm COOLING FAN MODELS



(FAN	NOT	INCLUDED)
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Part #	Length	Thermal Resistance
027443	6.94" (176.2mm)	0.055°C/W
027444	10.36" (263.1mm)	0.038°C/W



This data sheet represents only one of a broad range of products we make to cool electronics. Our representatives can help you configure a complete cooling solution for your individual applications. For assistance, contact any one of them from our web site or at the locations below.

Aavid Thermal Products, Inc. along with Fluent Inc.'s Icepak thermal design software and Applied Thermal Technologies, Inc. thermal design and validation services make up The Total Integrated Solution for Cooling ElectronicsTM. For more information on how to put our strengths to work for you, visit our web site at: http://www.aavid.com; Tel: (603) 224-9988, or contact Fluent at: http://www.icepak.com;Tel: (603) 643-2600, or Applied at: http://www.thermalcooling.com;Tel: (603) 666-4100.

For technical assistance, or placing an order, please visit our web-site for the local sales representative: http://www.aavid.com/reps/index.html or distributor near you: http://www.aavid.com/distribs/index.html

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