

FEATURES

These heatsinks are designed for use in Dynex Semiconductor high current, high power assemblies such as single, three or six phase bridges or AC controllers. Complete bridges of up to 6 devices can be constructed.

Dynex Semiconductor have suitable clamps to build these assemblies and also a comprehensive range of devices to suit a variety of output requirements.

APPLICATIONS

The type Y water cooled heatsink is designed to efficiently cool 50mm and smaller diameter thyristors, and diodes. It has a 'U' internal waterway system for heat extraction.

WATER CONNECTIONS

- S** Plain tube with swaged end brazed into heatsink.
- T** Plain tube with swaged end screwed into heatsink.
- P** Fir Tree connector brazed into heatsink.
- F** Fir Tree connector screwed into heatsink.
- G** Screwed termination for hose screwed into heatsink.
- H** Screw termination for hose brazed into heatsink.

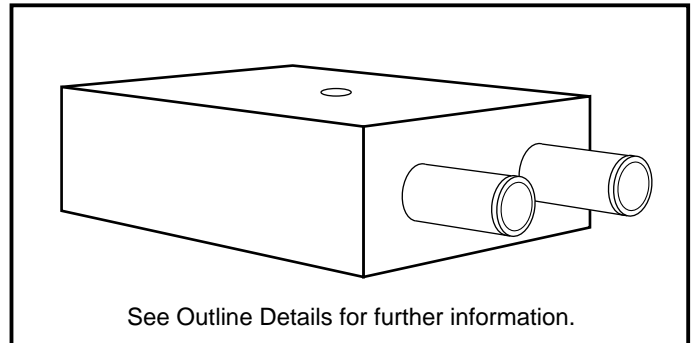


Fig. 1: Heatsink outline

NOTE: Where connectors are screwed into the heatsink stainless steel is normally used principally for de-ionised water unless otherwise requested. For brazed in connectors, copper or brass will be used.

Where brazing is used, the braze material is a silver/copper eutectic which is suitable for use with de-ionised water supplies with copper water connectors.

THERMAL RATINGS

Water Flow Ltr/min	Thermal Resistance					
	2 Heatsinks for Double Side Cooling Heatsink - Water in °C/W			2 Devices and 3 Heatsink Assembly Junction - Water in °C/W		
	Dynex Disc Outline Code			Dynex Disc Outline Code		
	T	E	D, F, G	D	F	G
2	0.0420	0.0370	0.0300	0.0540	0.0550	0.0540
4	0.0350	0.0295	0.0218	0.0432	0.0442	0.0432
6	0.0320	0.0268	0.0195	0.0406	0.0416	0.0406

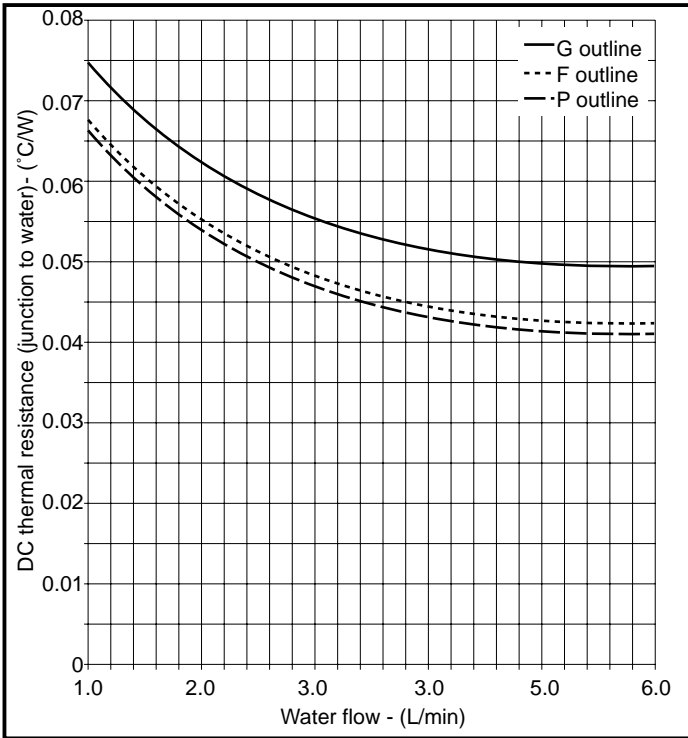


Fig. 2: DC thermal resistance junction to water inlet with water flow - 2x devices and 3x heatsinks

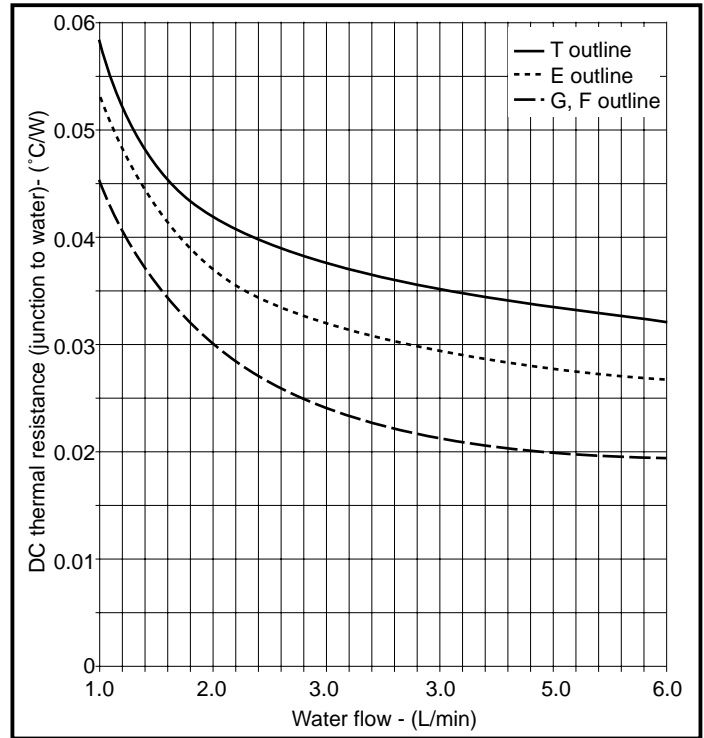


Fig. 3: Thermal resistance with water flow double side cooled - heatsink to water inlet

OUTLINE DETAILS

For further package information, please contact Customer Services. All dimensions in mm, unless stated otherwise. DO NOT SCALE.

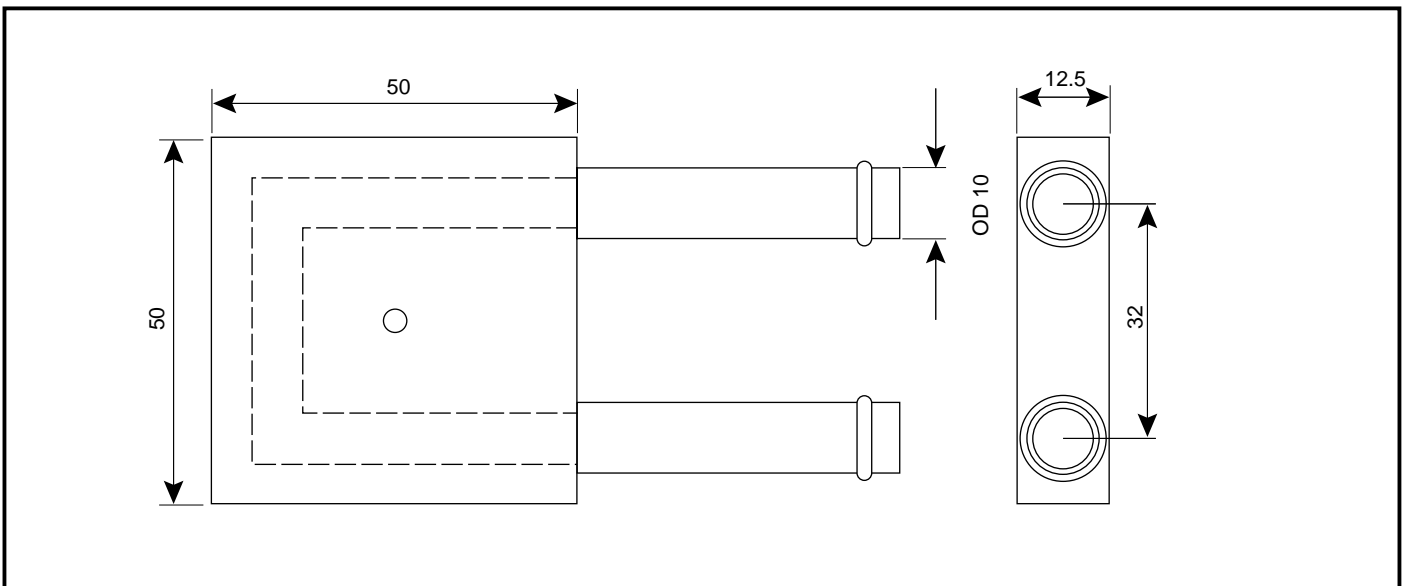


Fig. 3: Heatsink outline details

POWER ASSEMBLY CAPABILITY

The Power Assembly group was set up to provide a support service for those customers requiring more than the basic semiconductor, and has developed a flexible range of heatsink and clamping systems in line with advances in device voltages and current capability of our semiconductors.

We offer an extensive range of air and liquid cooled assemblies covering the full range of circuit designs in general use today. The Assembly group offers high quality engineering support dedicated to designing new units to satisfy the growing needs of our customers.

Using the latest CAD methods our team of design and applications engineers aim to provide the Power Assembly Complete Solution (PACs).

HEATSINKS

The Power Assembly group has its own proprietary range of extruded aluminium heatsinks which have been designed to optimise the performance of Dynex semiconductors. Data with respect to air natural, forced air and liquid cooling (with flow rates) is available on request.

For further information on device clamps, heatsinks and assemblies, please contact your nearest sales representative or Customer Services.



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Target Information: This is the most tentative form of information and represents a very preliminary specification. No actual design work on the product has been started.

Preliminary Information: The product is in design and development. The datasheet represents the product as it is understood but details may change.

Advance Information: The product design is complete and final characterisation for volume production is well in hand.

No Annotation: The product parameters are fixed and the product is available to datasheet specification.

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