Products / Liquid-cooled Cold Plates / High Contact

#### **Liquid-cooled Cold Plates**

## **High Contact**

HiContact<sup>TM</sup> assemblies (patent pending) are a costeffective method of cooling high heat concentration semiconductor devices without the expense, weight, or handling problems associated with cold plates fabricated completely from copper. Aavid-Thermalloy's HiContact cooling technology ensures minimum contact resistance between the heat producing device and the cooling fluid. The tube utilized in the HiContact assembly minimizes the number of thermal interface layers between the cooling liquid and the heat producing devices. 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**

- Copper tube in direct contact with the heated devices to handle high heat concentrations, reducing semiconductor temperature rise
- Aluminum mounting plate with copper cooling coil for low cost, high value - lower weight than all copper and easily modified/machined
- High conductivity epoxy filler between tube and plate
- Mounting surface machined smooth and flat for reduced resistance at mounting interface, maximizing heat transfer to cooling media and insuring copper and aluminum and coplanar

- Minimum mounting plate thickness
- Heat transferred laterally and assembly locked together
- Minimized weight outside the primary thermal path specifications

### 2 Pass Models

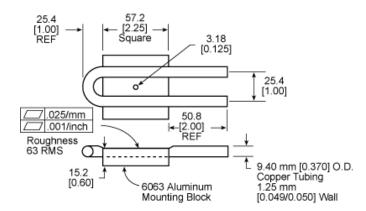
Plate: 6063-T5 aluminum

Tube: 1.3 mm (.05") wall, copper

Options: Stainless steel tube can be substituted for copper

Part Number	Finish	RoHS	PCN
416401U00000G	Unfinished	RoHS ✓ Compliant	Product Change Notice





# 6 Pass Models

Plate: 6063-T5 Aluminum Tube: 0.05 wall 3/8 dia. copper

Options: as required

Part Number	"X" Dim	Finish	RoHS	PCN
416101U00000	6.00"	Unfinished	RoHS Compliance PENDING	N/A
416201U00000	12.00"	Unfinished	RoHS Compliance PENDING	N/A
416301U00000	24.00"	Unfinished	RoHS Compliance PENDING	NA
416101C00000	6.00"	Gold Chromate	RoHS Compliance PENDING	N/A
416201C00000	12.00"	Gold Chromate	RoHS Compliance PENDING	N/A
416301C00000	24.00"	Gold Chromate	RoHS Compliance PENDING	NA
416101S00000	6.00"	AavGard	RoHS Compliance PENDING	N/A
416201S00000	12.00"	AavGard	RoHS Compliance PENDING	N/A
416301S00000	24.00"	AavGard	RoHS Compliance PENDING	NA



