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## Liquid-cooled Cold Plates

### High Contact

HiContact™ assemblies (patent pending) are a cost-effective 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

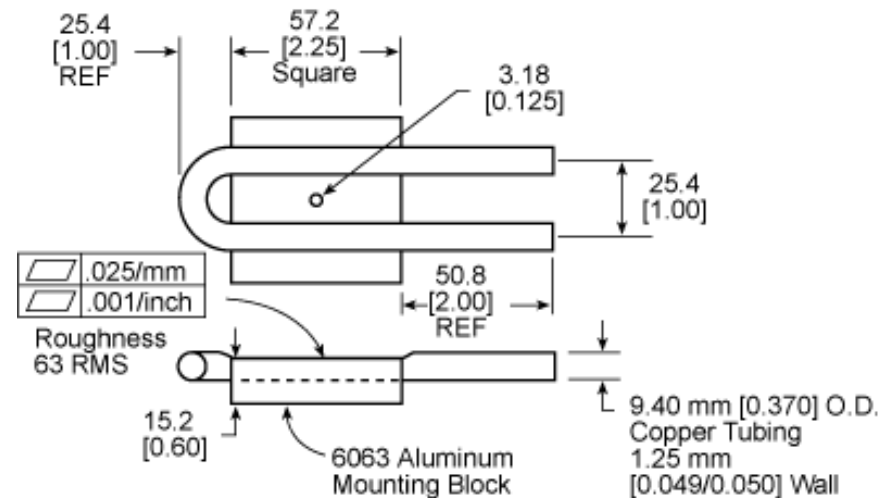
## 2 Pass Models

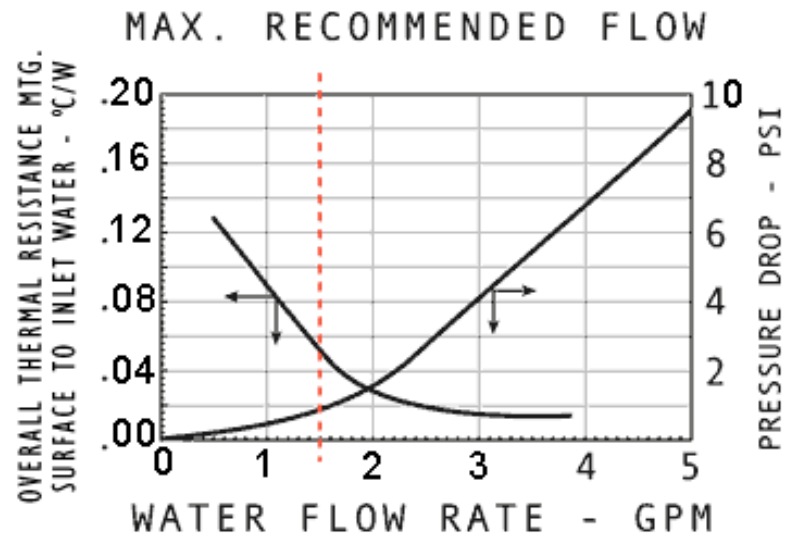
**Plate:** 6063-T5 aluminum

**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





## 4 Pass Models

**Plate:** 6063-T5 Aluminum

**Tube:** 0.05 wall 3/8 dia copper

**Options:** as required



Part Number	"X" Dim	Finish	RoHS	PCN
416501U00000G	6.00"	Unfinished	RoHS <b>Compliant</b>	Product Change Notice
416601U00000G	12.00"	Unfinished	RoHS <b>Compliant</b>	Product Change Notice
416501C00000	6.00"	Gold Chromate	RoHS <b>Compliance PENDING</b>	NA
416601C00000	12.00"	Gold Chromate	RoHS <b>Compliance PENDING</b>	NA
416501S00000	6.00"	AavGard	RoHS <b>Compliance PENDING</b>	NA
416601S00000	12.00"	AavGard	RoHS <b>Compliance PENDING</b>	NA

