

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Smart Technology. Delivered.™

# DA PowerCool Series DA-045-12-02

Thermoelectric Assembly



The DA PowerCool Series is a Direct-to-Air thermoelectric assembly (TEA) that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling objects via conduction. Heat is absorbed through a cold plate and dissipated thru a high density heat exchanger equipped with an air ducted shroud and brand name fan. The thermoelectric modules are custom designed to achieve a high coefficient of performance (COP) to minimize power consumption. This product series is available in a wide range of cooling capacities and voltages. Custom configurations and moisture protection options are available, however, MOQ applies.

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### **FEATURES**

- Compact design
- Precise temperature control
- Reliable solid-state operation
- DC operation
- RoHS compliant

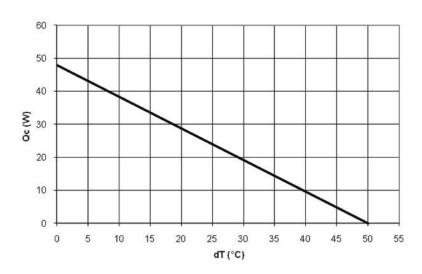
## **APPLICATIONS**

- Analytical instrumentation
- Medical diagnostics
- Photonics laser systems
- Industrial instrumentation
- Food and beverage cooling

SPECIFICATIONS		
Cooling Power Qcmax (W)	48	
Running Current (A)	6.1	
Startup Current (A)	7.0	
Nominal Voltage (V)	12	
Max Voltage (V)	15	
Power Input (W)	73	
Operating Temperature (°C)	-10 to 46	
Weight (kg)	1.2	
MTBF (fans – hrs)	50,000	
Performance Tolerance	±10%	

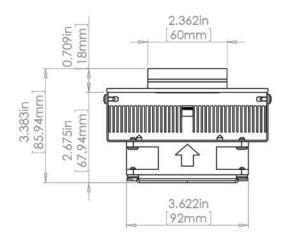
## **PERFORMANCE CURVE**

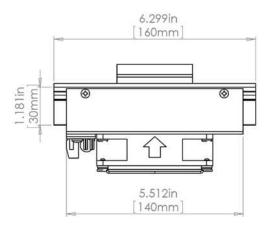




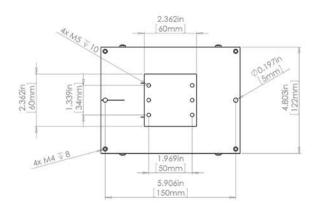


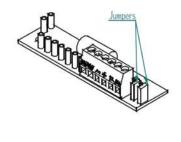
### ISOMETRIC DRAWINGS





#### MOUNTING HOLE LOCATION

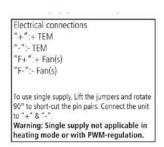




## **NOTES**

For indoor use only Thermally Conductive Grease enclosed Overheating Thermostat:  $75^{\circ}\text{C} \pm 5^{\circ}\text{C}$  on hot side heat sink surface

## **WIRING SCHEMATIC**



#### LAIRD-ETS-DA-045-12-02-DATA-SHEET-100616

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