ADVANCED THERMOELECTRIC

Technical Data Sheet

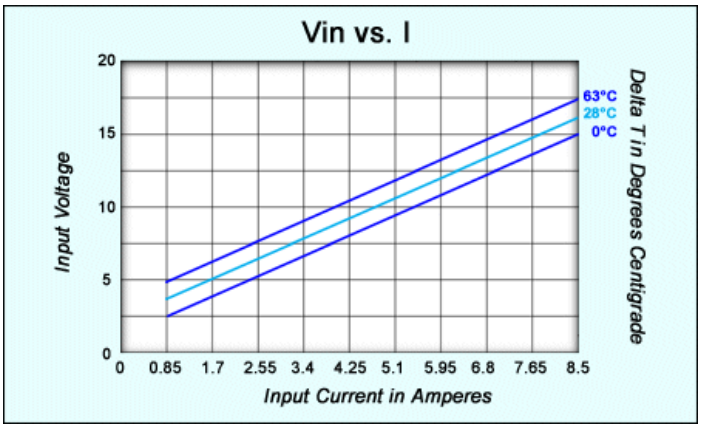
TM-127-1.4-6.0

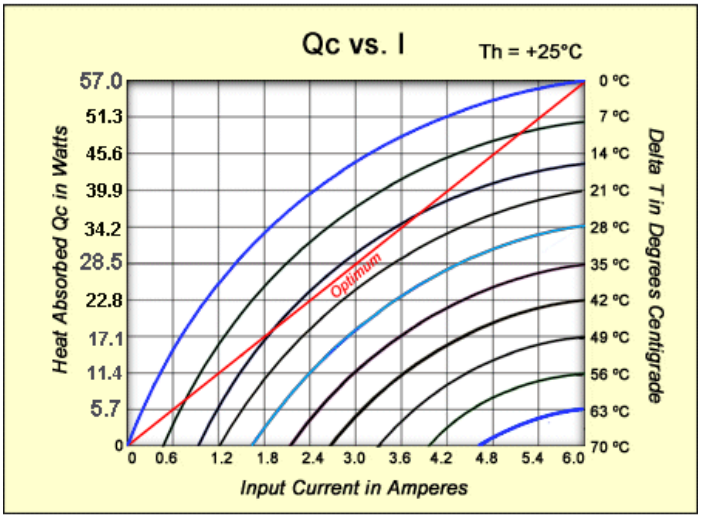
Thermoelectric Module

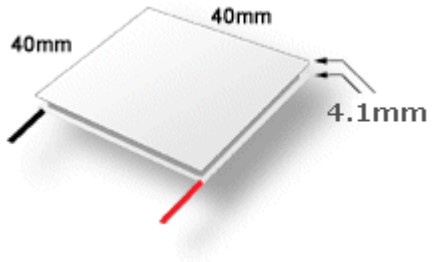
UNIT CODE	DESCRIPTION
TM-127-1.4-6.0	Thermoelectric Cooling Module

SPECIFICATIONS			
Current I_{max}	Voltage V_{max}	Cooling Capacity Q_{max}	Maximum Delta T ΔT_{max}
6.0 Amps	16.5 Volts	53 Watts	70 °C

PERFORMANCE CURVES (T_h = 25 °C)







TM-127-1.4-6.0 multi-purpose single-stage thermoelectric module is our most popular 40 x 40 mm module intended for use with 12 to 15-volt DC power sources. Although it doesn't have the greatest Qmax of our modules in this configuration it is a solid performer that can be used with a variety of economical extruded heat sinks, without the hot-side temperature becoming unreasonably high. Formerly was pn: HP127-1.4-6.0

TM-127-1.4-6.0 may be used for cooling, heating and temperature stabilization and is employed in a wide range of applications including consumer, industrial, lab, scientific & biomedical, telecommunications, military, aerospace and test. Also available with porch, metallized and tinned surfaces and in strings from 2-12 modules long. This part is RoHS compliant

Operating temperature -50°C +250°C
Height, flatness and parallel variance: ± 0.02mm

Option Suffix designations:
Anti-corrosion Potting = "P"
Epoxy edge sealing = "E"
Lapping to ± 0.01mm = "L"
(for example ST-127-1.4-4.0"PE")

Prices: 100+ $18.95 1K+ $13.95

Module Characteristics and Value Descriptions:

I_{max} is the maximum (optimal) input current in amperes.
V_{max} is the maximum input voltage in volts when the current is optimal (I_{max}).
Q_{max} is the maximum amount of heat the module is capable of pumping. This value is achieved when there is no difference in the temperature (DT=0) on the modules two surfaces. If your application requires cooling, the heat pumping capacity will be less.

ΔT_{max} or DT_{max} is the maximum temperature differential between the hot and cold side of the module with no heat load (Q=0). As the thermal mass of the object to be cooled increases the ΔT narrows until Q_{max} is reached and ΔT=0.

ADVANCED THERMOELECTRIC · PO Box 7091 Nashua, NH 03060 · (603) 888-2467 · sales@electracool.com