



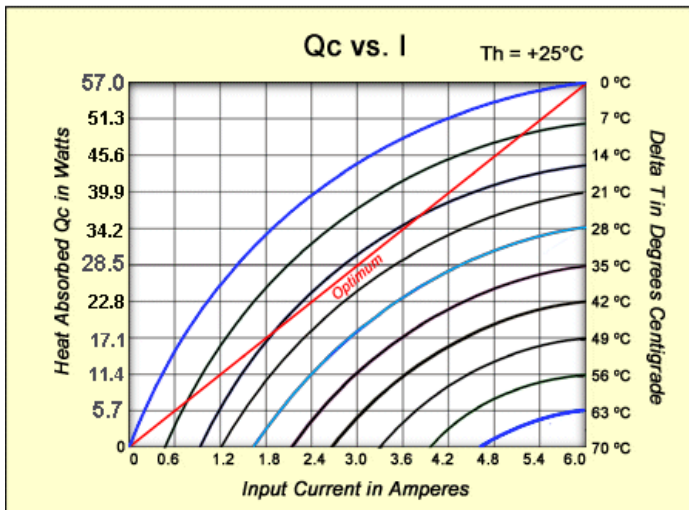
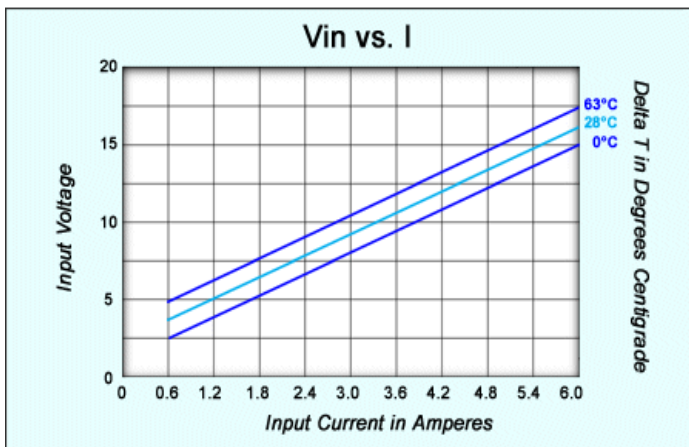
ST-127-1.4-6.0

Standard Series Thermoelectric Module

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

SPECIFICATIONS			
Current I_{max}	Voltage V_{max}	Cooling Capacity Q_{max}	Maximum Delta T DT_{max}
6.0 Amps	17.5 Volts	57 Watts	71 °C

PERFORMANCE CURVES ($T_h = 25\text{ °C}$)



This 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. [High temperature](#) and thermal cycling versions available.

ST-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, lab/scientific/biomedical, industrial, telecommunications, military, aerospace and test. Also available with porch, metallized and tinned surfaces and in strings from 2-12 modules long.

100% QC (C of C available by Lot)
 Operating temperature -50°C +150°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-127-1.4-6.0"PE")

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.
 DT_{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 becomes fewer degrees until Q_{max} is reached and $\Delta T=0$.

All specifications, data and drawings are subject to change without notice Rev: 11/04