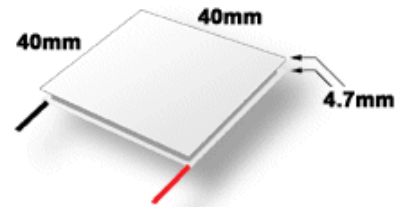
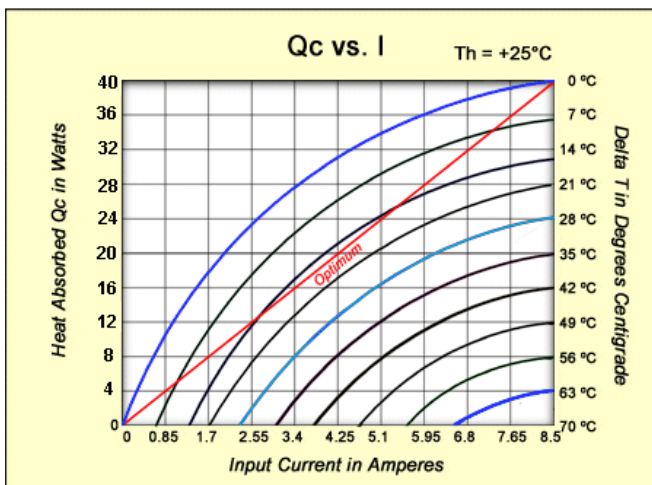
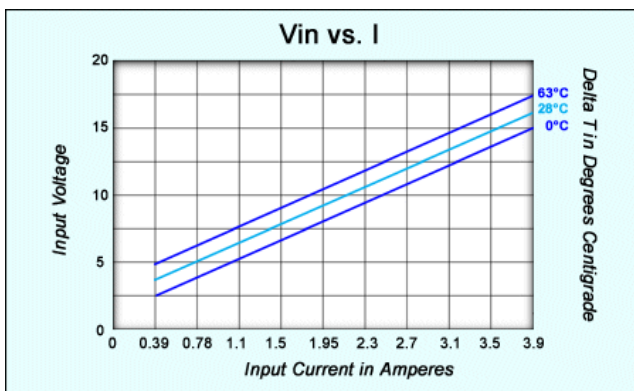


UNIT CODE	DESCRIPTION
ST-127-1.4-4.0	Thermoelectric Cooling Module

SPECIFICATIONS			
Current I_{max}	Voltage V_{max}	Cooling Capacity Q_{max}	Maximum Delta T DT_{max}
4.0 Amps	17.5 Volts	38 Watts	70 °C

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



ST-127-1.4-4.0 is our least powerful single-stage thermoelectric module, in the 40 x 40 mm footprint, intended for use with 12 to 15-volt DC power sources. This module is best used in applications where maximum coverage is desired but loads (or DT 's) are not substantial. This is often an excellent choice if temperature stabilization near ambient is desired or when space for a hot-side heat-sink is limited. Also available with porch, metallized and tinned surfaces and in strings from 2-12 modules long.

ST-127-1.4-4.0 may be used for cooling, heating and temperature stabilization and is employed in a wide range of applications including electro-optic/telecommunications, lab/scientific/biomedical, consumer, aerospace/military and test.

A "HP" [High Performance version](#) is available.
 100% QC (C of C available by Lot)
 Operating temperature -50°C +150°C
 Height, flatness and parallel variance: $\pm 0.02\text{mm}$
 Option Suffix designations:
[Anti-corrosion Potting](#) = "P"
[Epoxy edge sealing](#) = "E"
 Lapping to $\pm 0.01\text{mm}$ = "L"
 (for example ST-127-1.4-4.0"PE")

All specifications, data and drawings are subject to change without notice Rev: 4/05

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 DT becomes fewer degrees until Q_{max} is reached and $DT=0$.