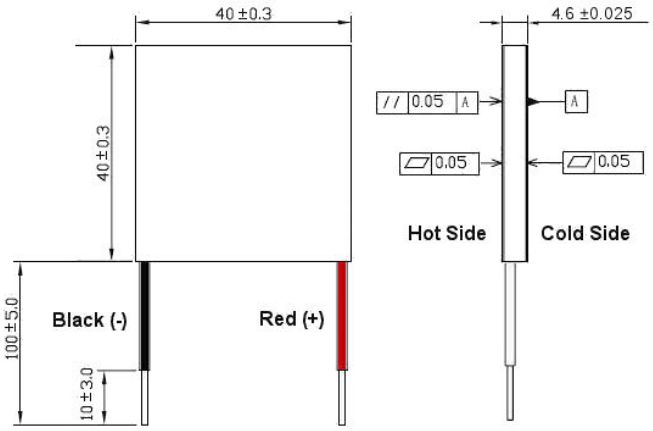
Technical Data Sheet

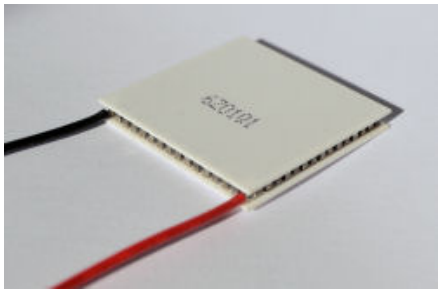
TM-127-1.4-4.0

Thermoelectric Module

Specifications (Hot-Side Temperature 27 °C)

I_{max} maximum current at ΔT_{max}	V_{max} maximum voltage at ΔT_{max}	Qc_{max} maximum cooling capacity at I_{max}, V_{max} and ΔT = 0 °C	ΔT_{max} maximum temperature difference at I_{max}, V_{max} and Qc = 0W	Internal Resistance
4.0 Amps	15.5 Volts	32 Watts	70 °C	3.15 Ω ± 10%





Dimensions: 40 x 40 x 4.6 (mm)

Operating temperature range: -50 °C ~ +200 °C
(Solder melting point: +235 °C)

Thickness tolerance: ± 0.025mm
Flatness and parallel variance: ± 0.05mm
(Lapping to ± 0.01mm for multi-module apps available.)

Standard lead wires: 20 AWG, Tin (Sn) plated at module interface, with a maximum temperature of +105 °C
(Other wiring options available)

Maximum recommended compression: 1Mpa

Ceramics: Alumina (AL_2O_3)

Lot number (only) printed on the cold-side ceramic.

RoHS Compliant

Are you a manufacturer and need a slightly different module? Our TE modules can be customized in a variety of ways and we can likely provide precisely what you require. Let us know what you need and we'll be happy to let you know what we can do for you.

With a cooling capacity of 32 watts, TM-127-1.4-4.0 is our least powerful single-stage thermoelectric module with a 40 x 40 mm footprint and 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 ΔT's) are not substantial. It's also an excellent choice if temperature stabilization near ambient is desired or if space for a hot-side heat-sink is limited. Often used in multi-module applications.

May be used for cooling, heating and temperature stabilization and is used in a wide range of applications including consumer goods, instrumentation, medical, analytical, laboratory & scientific instruments, electro-optics, telecommunications, industrial and military.

Available in pre-wired and sealed strings, of your design or ours (2-12 modules long). Can be built with metalized (and tinned) surfaces. A version for thermal cycling is available. Contact us for details.

Option Prices and Designations (Suffix):

RTV Edge sealing = "RTV"
Epoxy edge sealing = "E"
Lapping to ± 0.01mm = "L"

(for example TM-127-1.4-6.0 "EL")

TM 127-1.4-4.0 Web Page Link

Contact sales@electracool.com for a quotation

Advanced Thermoelectric, PO Box 1003, White River, VT 05001
Advanced Thermoelectric toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com

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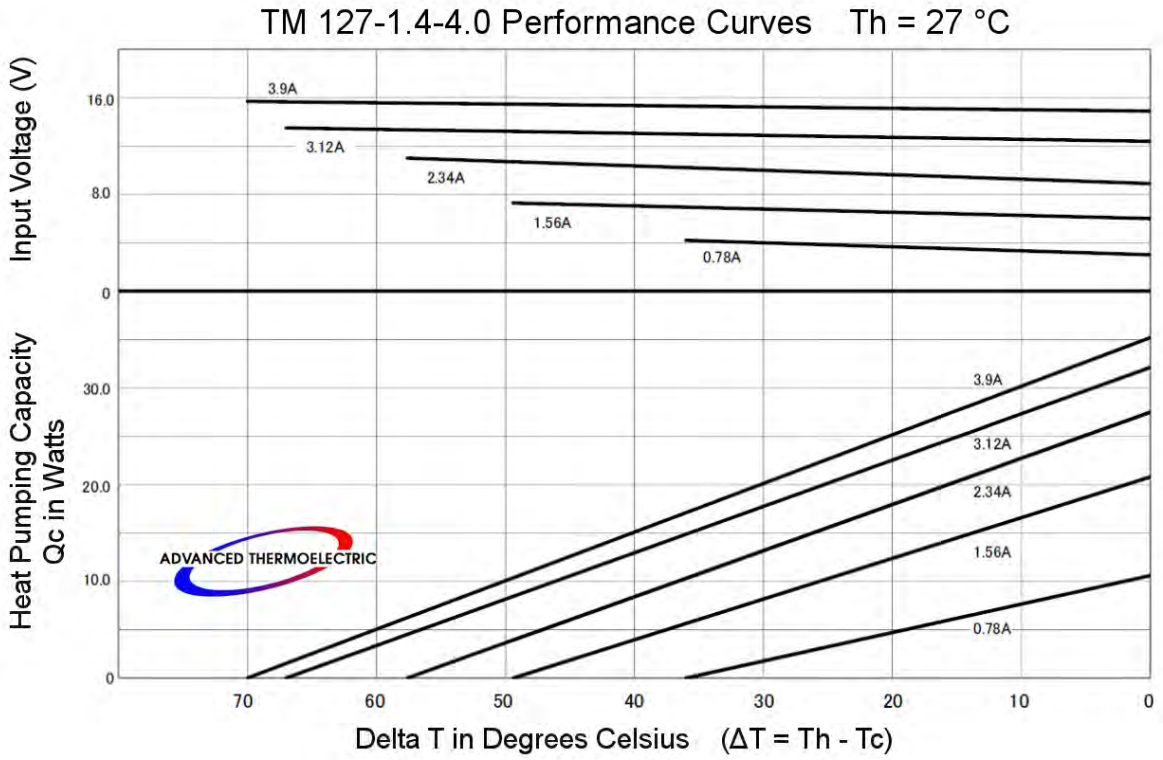

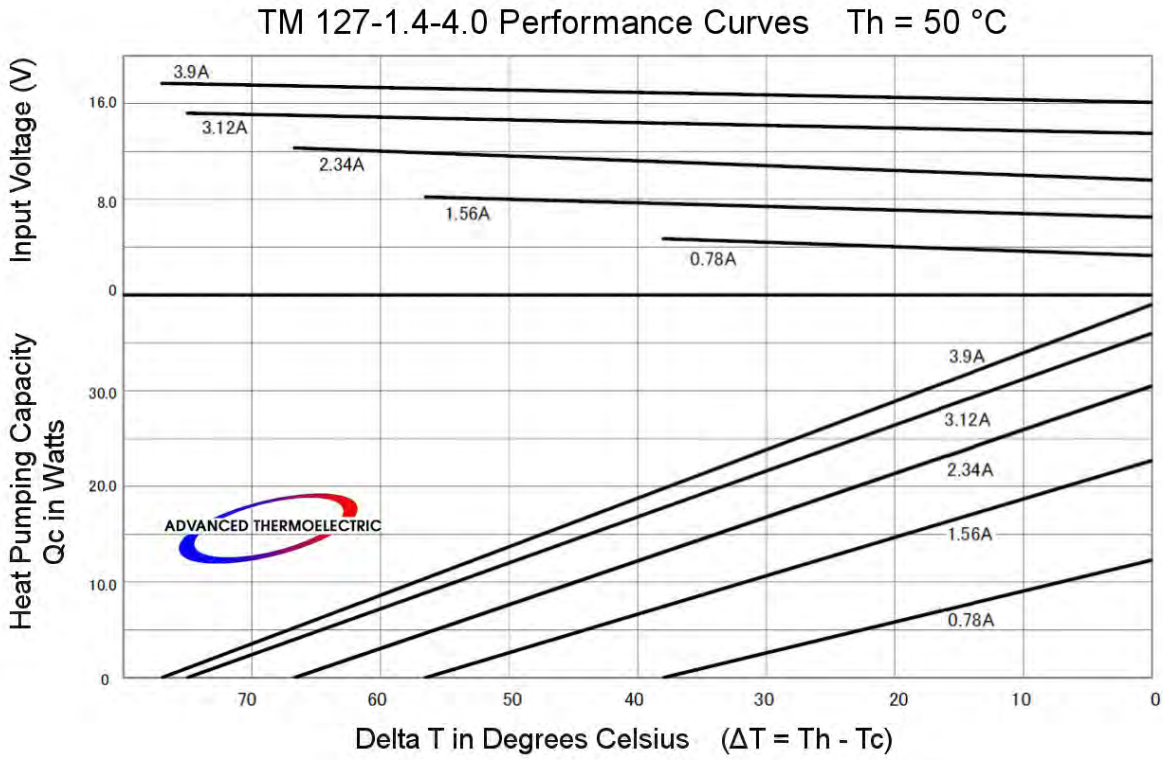

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