TM-31-1.0-6.0
Thermoelectric Cooling Module

ADVANCED THERMOELECTRIC

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 $\Delta T = 0$ °C	ΔT_{max} maximum temperature difference at I_{max}, V_{max} and $Qc = 0W$	Internal Resistance
6.0 Amps	3.9 Volts	13 Watts	70 °C	0.45 Ω ± 10%

15±0.3

15±0.3

100±5

Black (-)   Red (+)

10±3.0

3.1±0.025

// 0.05 A

A

0.05

0.05

Hot Side   Cold Side
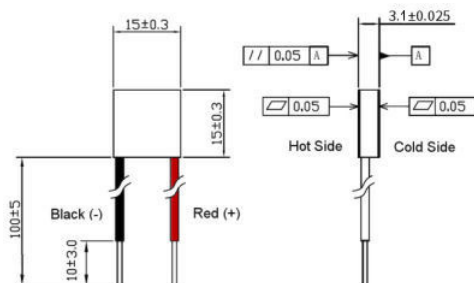
Dimensions: 15 x 15 x 3.1mm

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 available.)

Standard lead wires: 22 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)
Available with metalized and tinned surfaces

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.

TM 31-1.0-6.0 Web Page
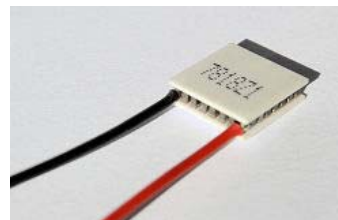
With a Qcmax of 13 watts (Th 27 °C), TM 31-1.0-6.0 is our most powerful single-stage thermoelectric module with a 15 x 15 mm footprint.

TM 31-1.0-6.0 is used for cooling, heating and temperature stabilization and is employed in a wide range of applications including medical, analytical, laboratory & scientific instruments, electro-optics, telecommunications and military. A version for thermal cycling is available.

In electro-optic and photonic applications, TM 31-1.0-6.0 is commonly used to maintain a constant temperature in order to stabilize the wavelength of a diode, detector or sensor.

Standard Options (PN Suffix)**:**

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

(for example TM-31-1.0-6.0 "EL")
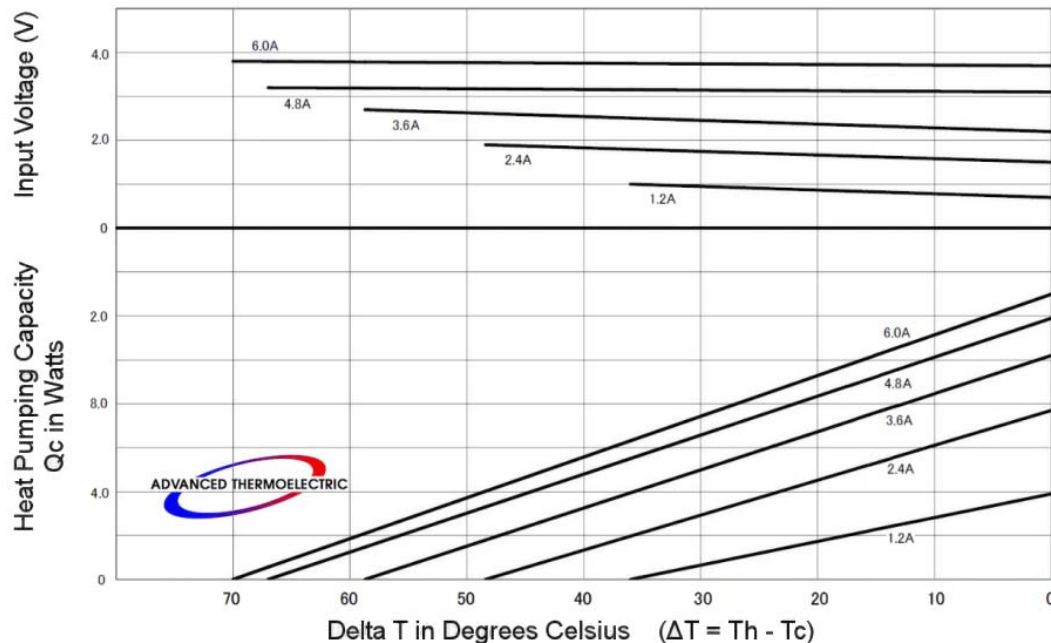
Contact sales@electracool.com for a quotation

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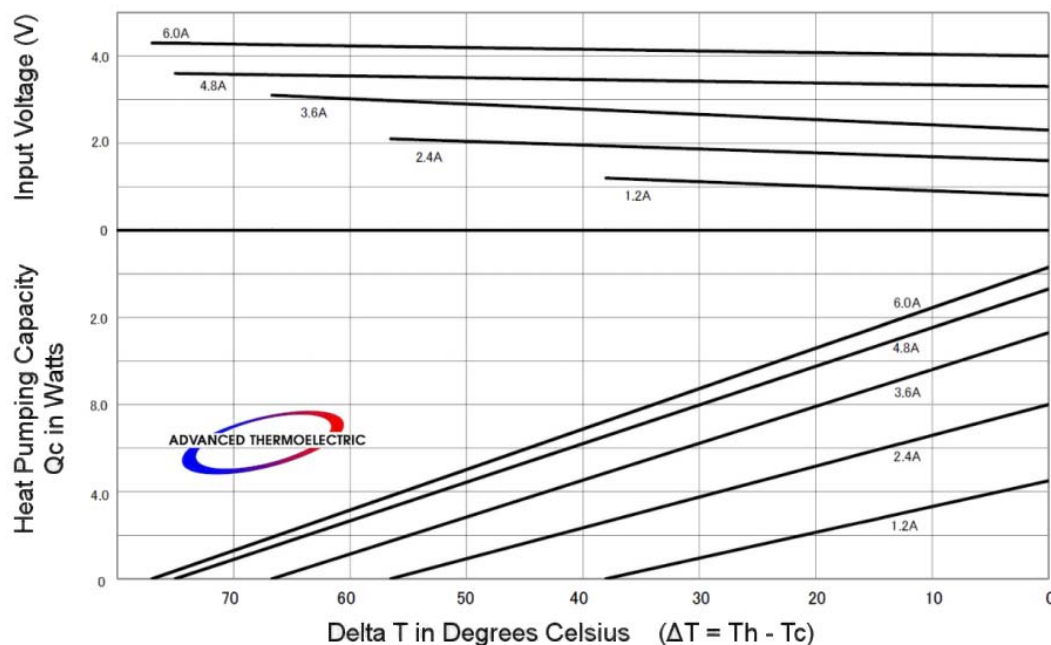toll-free 1-866-665-5434   (603) 888-2467   sales@electracool.com

ADVANCED THERMOELECTRIC

TM 31-1.0-6.0 Performance Curves   Th=27 °C

TM 31-1.0-6.0 Performance Curves   Th=50 °C

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