ADVANCED THERMOELECTRIC

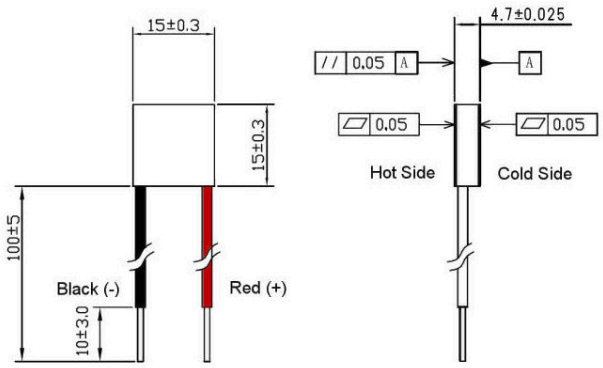
Technical Data Sheet

TM 31-1.0-2.0

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
2.0 Amps	3.8 Volts	4.4 Watts	70 °C	1.65 Ω ± 10%



Dimensions: 15 x 15 x 4.7 (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: 22 AWG, Tin (Sn) plated at module interface, with a maximum temperature of +105 °C
(Other wiring options available)

Maximum recommended compression: 1Mpa

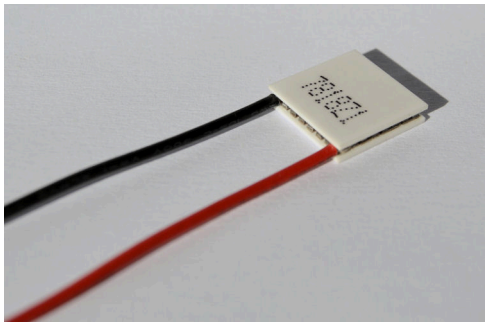
Ceramics: Alumina (AL_2O_3)
Metalized (and tinned) surfaces available

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 31-1.0-2.0 Web Page



With a Qcmax of 4.4 watts (Th 27 °C), TM 31-1.0-2.0 is our least powerful multi-purpose module in the 15 x 15 mm footprint and is typically operated with a 3.3V DC power source. At full power the maximum total heat ejected by this module is just 12 watts. This module is ideal for applications that don't have a significant thermal load or much room for heat-sinking.

In electro-optic and photonic applications, TM 31-1.0-2.0 is commonly used to stabilize the wavelength of a diode, detector or sensor at a temperature near ambient.

TM 31-1.0-2.0 may be used for cooling, heating and thermal stabilization and is employed in a wide range of applications including including electro-optics & photonics, telecommunications, medical, analytical, laboratory & scientific instruments, and military. A version for thermal cycling is available.

Option Designations (Suffix):

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

(for example TM 31-1.0-2.0 "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

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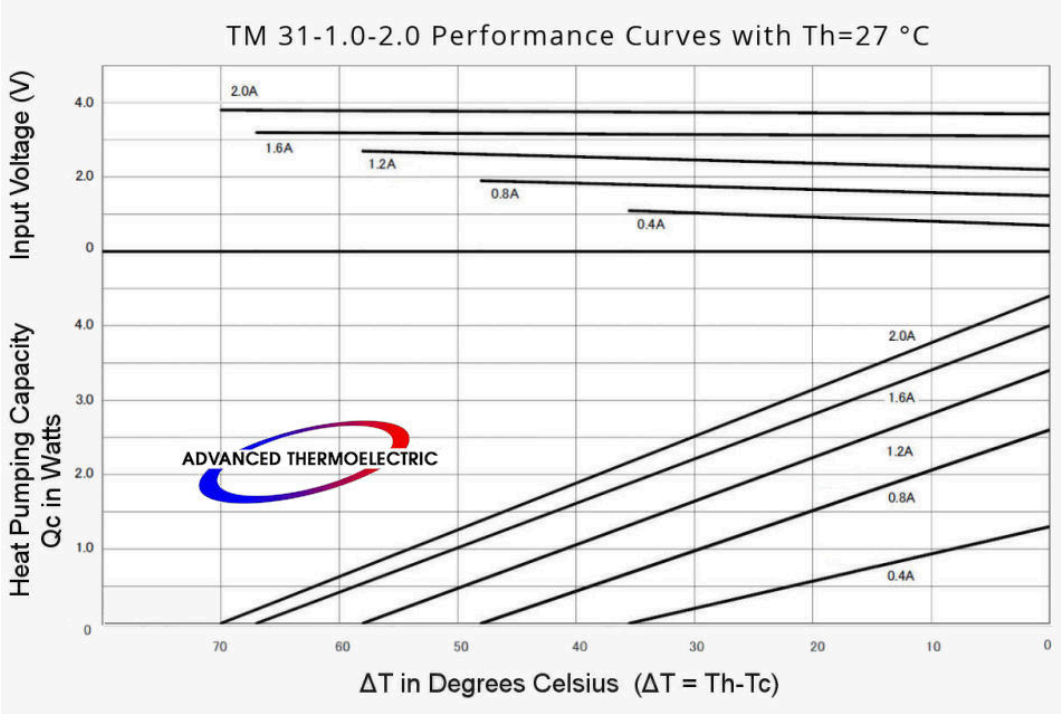
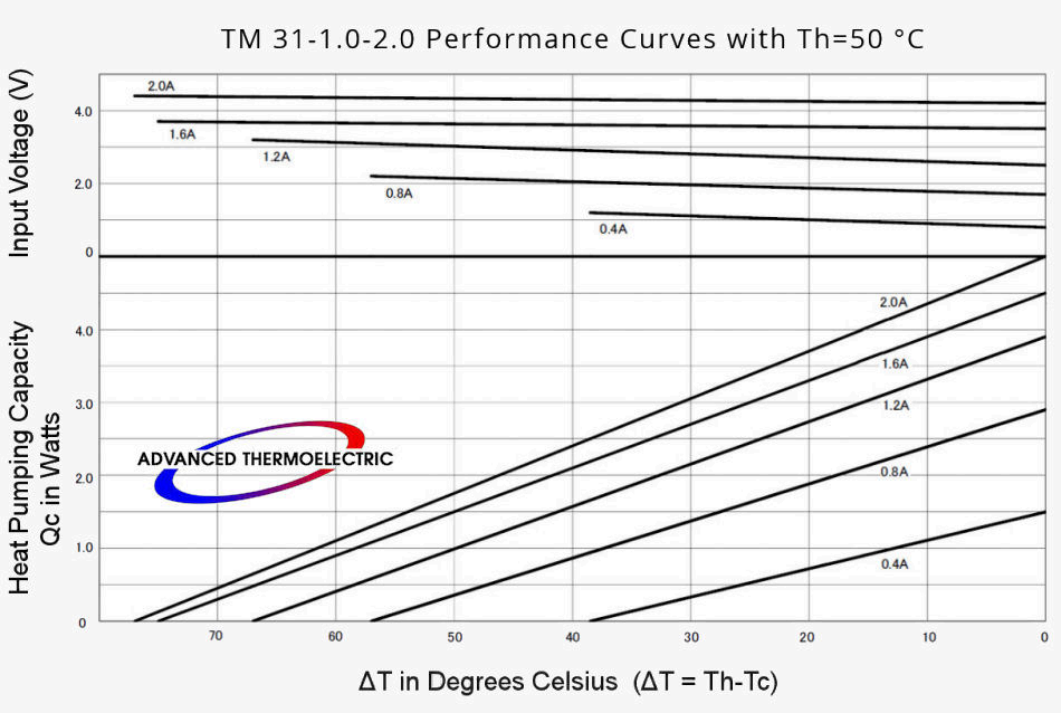
Thermoelectric cooling Module





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