ADVANCED THERMOELECTRIC

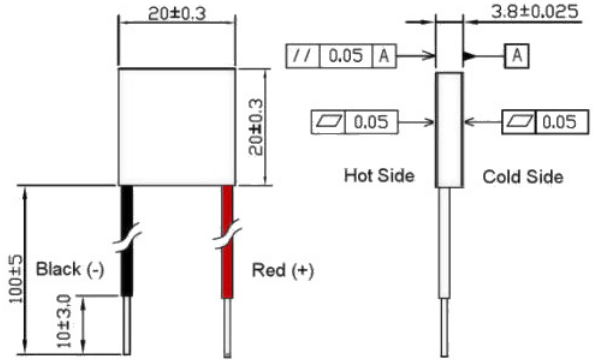
Technical Data Sheet

TM-71-1.0-3.0

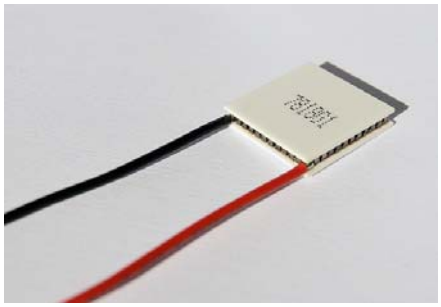
Thermoelectric Module

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
3.0 Amps	8.8 Volts	16.6 Watts	70 °C	2.2 Ω ± 10%



Dimensions: 20 x 20 x 3.8 (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 71-1.0-3.0 Web Page

Multi-purpose module TM 71-1.0-3.0 is a popular 20 x 20mm cooler intended for use with 5 to 8.6 volt (DC) power sources. Its compact size, good cooling capacity and relatively low heat ejection, make the module particularly popular where thermal loads are moderate and/or heatsinking space is limited.

TM 71-1.0-3.0 may be used for cooling, heating and thermal stabilization and is employed in a wide range of applications including electro-optic/photonic, fiber optic, aerospace/military, telecommunications. A version for thermal cycling is available.

Can be used with a very wide variety of economical extruded heat-sinks without the hot-side temperature becoming unreasonably high. It's also frequently used in strings. For example, two connected in series can be operated from a 12V source (or 15V). Four in series are operated with a 24V source, etc. A combination of parallel strings of modules in series allows coverage of a large surface area.

Option Prices and Designations (Suffix):

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

(for example TM-71-1.0-3.0 "EL")

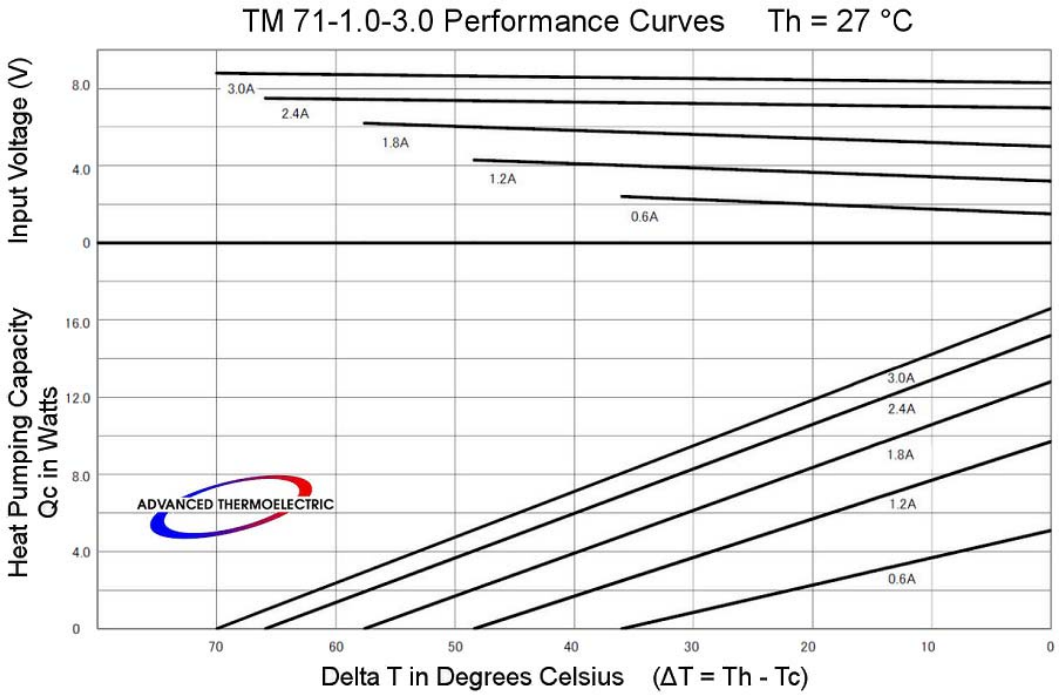
Contact sales@electracool.com for a quotation

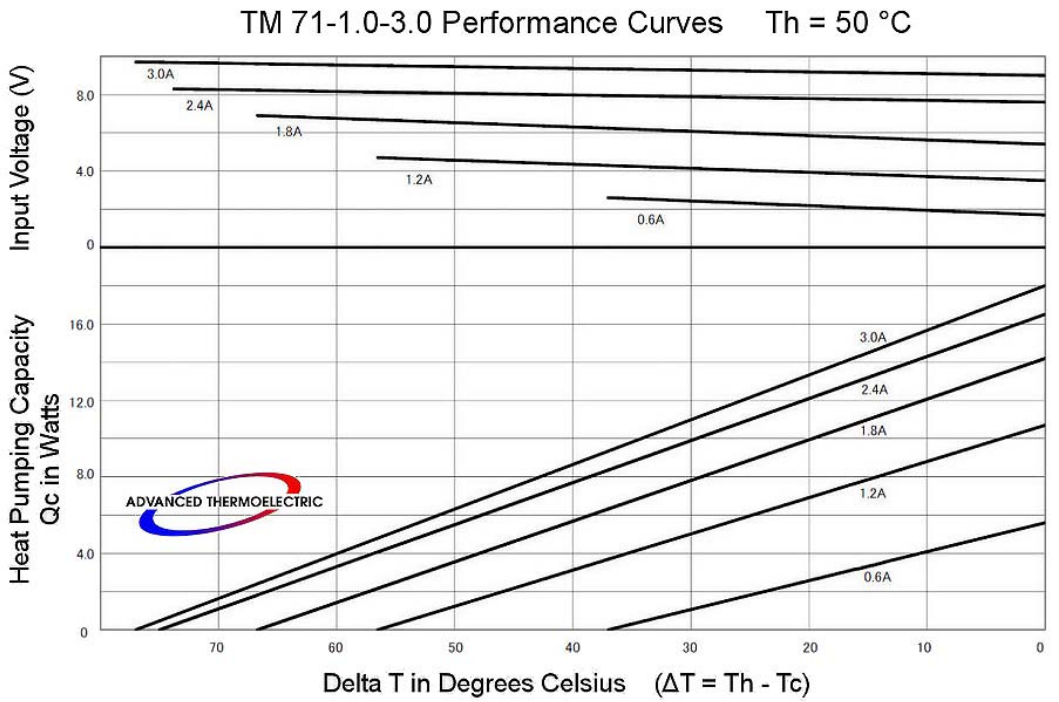
Advanced Thermoelectric, PO Box 1003, White River, VT 05001
Advanced Thermoelectric toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com

Technical Data Sheet

TM 31-1.4-8.5

Thermoelectric cooling Module





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