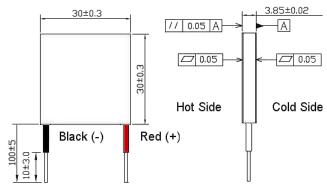


TM-127-1.0-3.0

Thermoelectric Module

Specifications (Hot-Side Temperature 27 °C)

$\label{eq:max} \textbf{I}_{\mbox{max}}$ maximum current at $\Delta T_{\mbox{max}}$	V _{max} maximum voltage at ΔT _{max}	\mathbf{Qc}_{max} maximum cooling capacity at I_{max} , V_{max} and $\Delta T = 0$ °C	$\begin{array}{c} \Delta T_{max} \\ \text{maximum temperature difference} \\ \text{at } I_{\text{max}}, V_{\text{max}} \text{ and } Qc = 0W \end{array}$	Internal Resistance
3.0 Amps	15.7 Volts	29.8 Watts	70 °C	$4.0~\Omega~\pm10\%$



Dimensions: 30 x 30 x 3.85mm

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

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

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

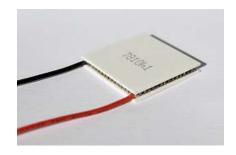
Ceramics: Alumina (AL₂O₃) Metalized (and tinned) surfaces available

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 127-1.0-3.0 Web Page Link



With almost 30 watts of cooling capacity, in a module a little over an inch square, TM 127-1.0-3.0 is powerful enough to cool a wide range of components. In the 30 mm footprint, it's got the perfect balance between good cooling capacity with the ability to use a variety of economical (extruded) heat-sinks that can keep the hot-side temperature from becoming unreasonably high.

May be used for cooling, heating and temperature stabilization in a wide range of applications including consumer goods, 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.

Standard Option Designations (Suffix):

Epoxy edge sealing = "E" RTV Edge sealing = "RTV" Lapping to ± 0.01mm = "L" (for example TM-127-1.0-3.0 "EL")

Contact sales@electracool.com for a quotation

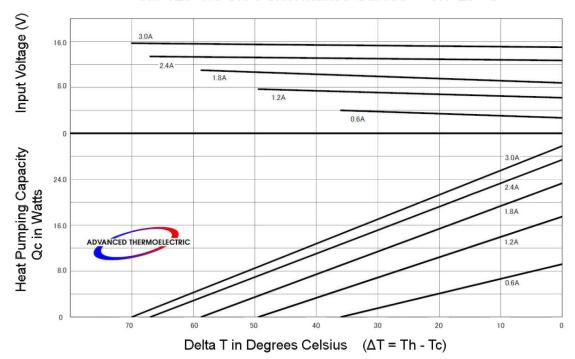
Advanced Thermoelectric, PO Box 1003, White River, VT 05001 toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com



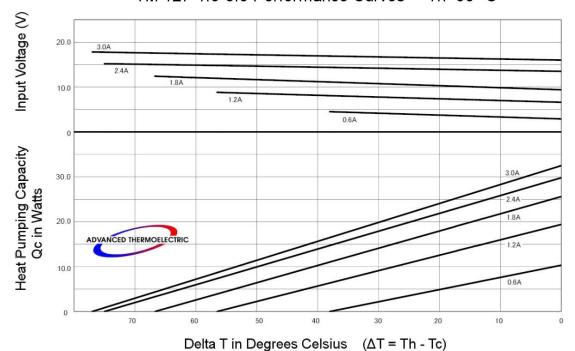
TM-127-1.0-3.0

Thermoelectric Module





TM 127-1.0-3.0 Performance Curves Th=50 °C



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