

# Thermoelectric module TM - 127-1.4-8.5



## Performance Data

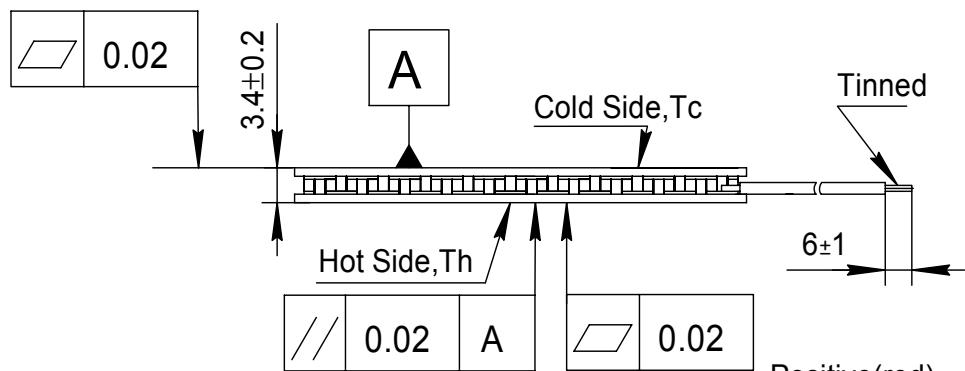
I <sub>max</sub> (amps)	8.5	$\Delta T = \Delta T_{max}$ . Th=25 ± 0.5 °C.
V <sub>max</sub> (volts)	14.6	Th=25 ± 0.5 °C. $\Delta T = \Delta T_{max}$ . I=I <sub>max</sub> ± 0.1A
$\Delta T_{max}$ (°C)	71	Th=25 ± 0.5 °C. I=I <sub>max</sub> ± 0.1A
Q <sub>max</sub> (watts)	74.8	Th=T <sub>c</sub> =25 ± 0.5 °C. I=I <sub>max</sub> ± 0.1A
AC resistance (ohms)	1.5	25 ± 0.5 °C.

Environment: dry air, N<sub>2</sub>

Tolerances for thermal and electrical parameters ± 10%

Drawing № ND 002.00.00

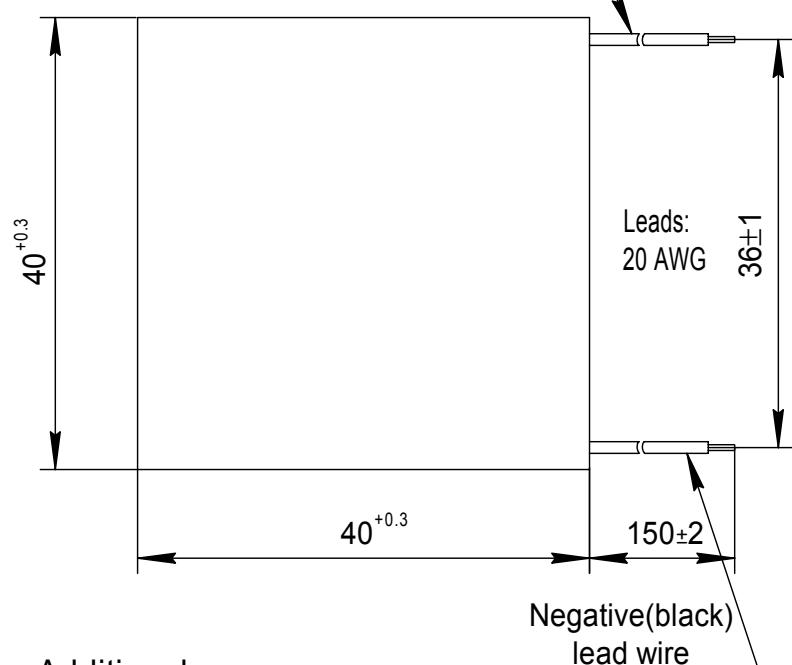
Dimensions in millimeters



## Options

Model Number	Description
TM-127-1.4-8.5 M	High reliable version on Cold Side

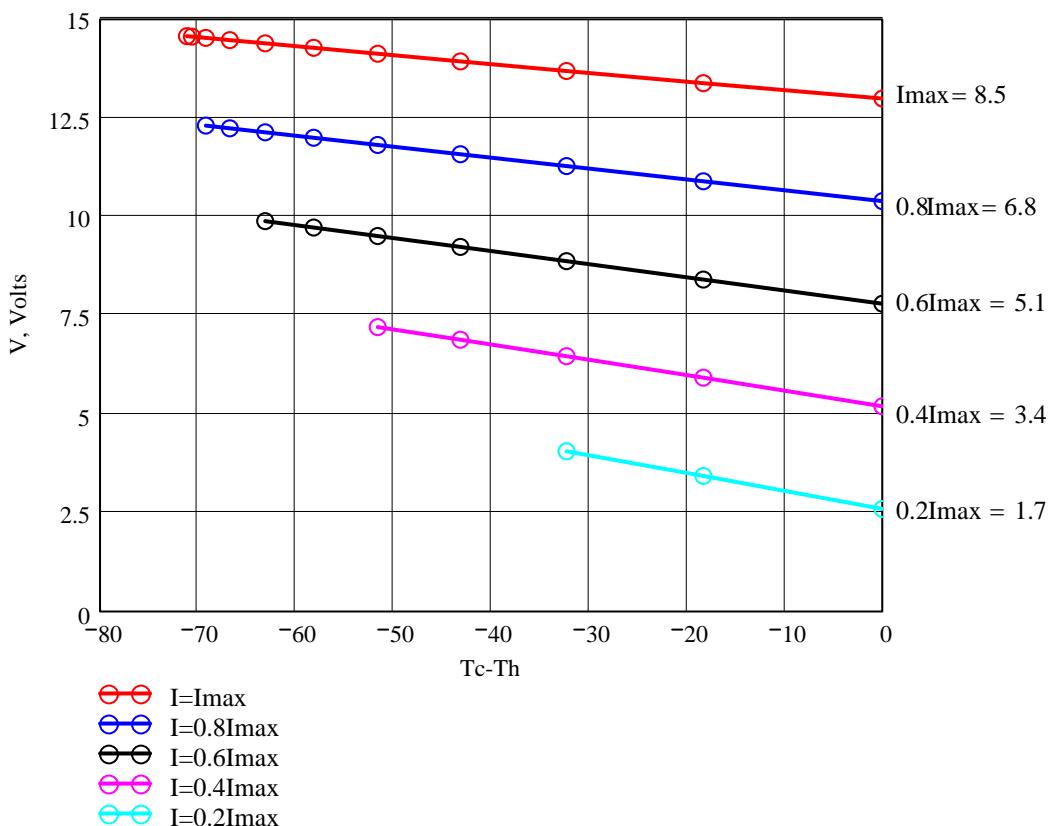
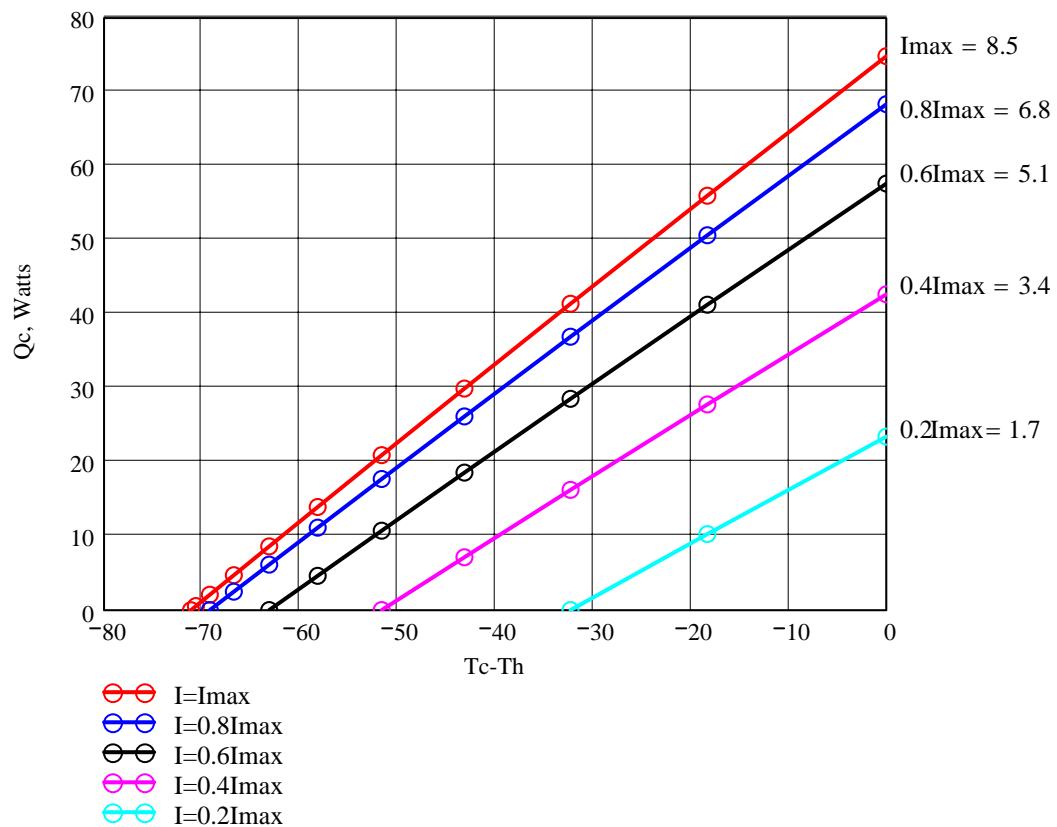
Lead wire insulation	Module maximum processing temperature
PVC	90°C
Silicone	200°C
PTFE	200°C



## Additional

- RoHS 2002/95/EC compliant
- Cold Side and Hot Side Ceramics: Al<sub>2</sub>O<sub>3</sub>, white 96%
- Assembling Solder: SnSb, M.P. 232 °C ; SnCu M.P. 227 °C

Performance graphs for TM-127-1.4-8.5 modules at Th=25 °C  
 Environment: dry air, N<sub>2</sub>



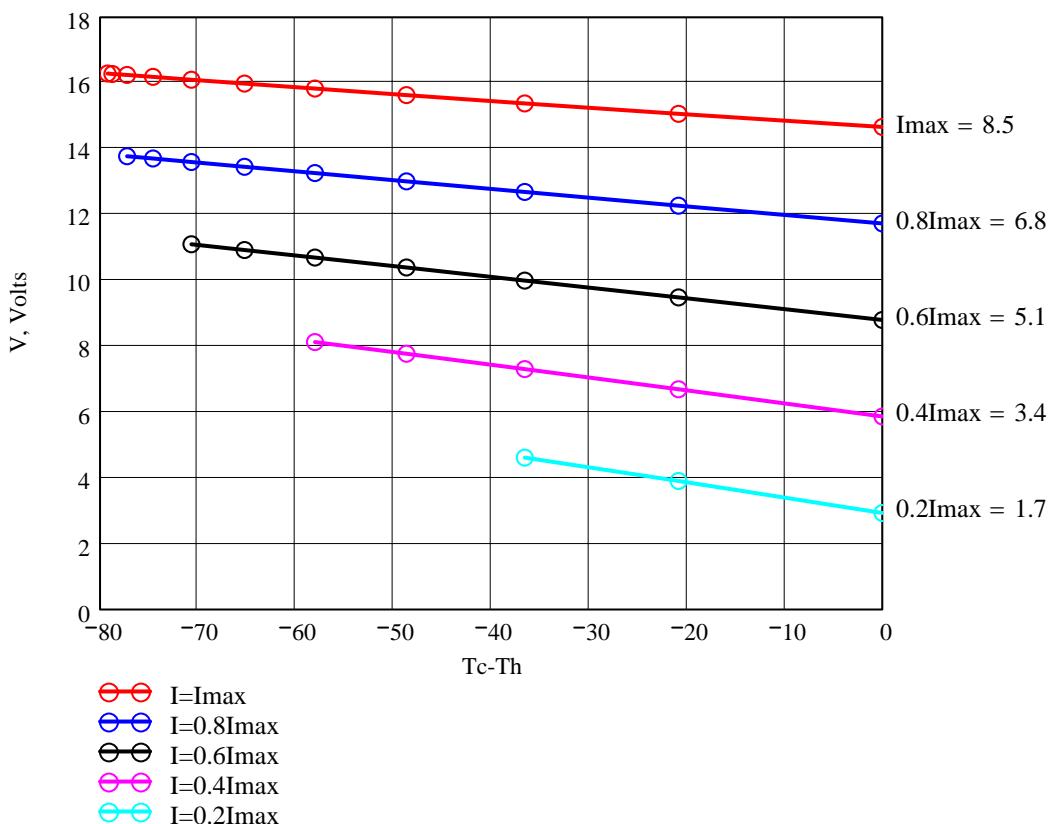
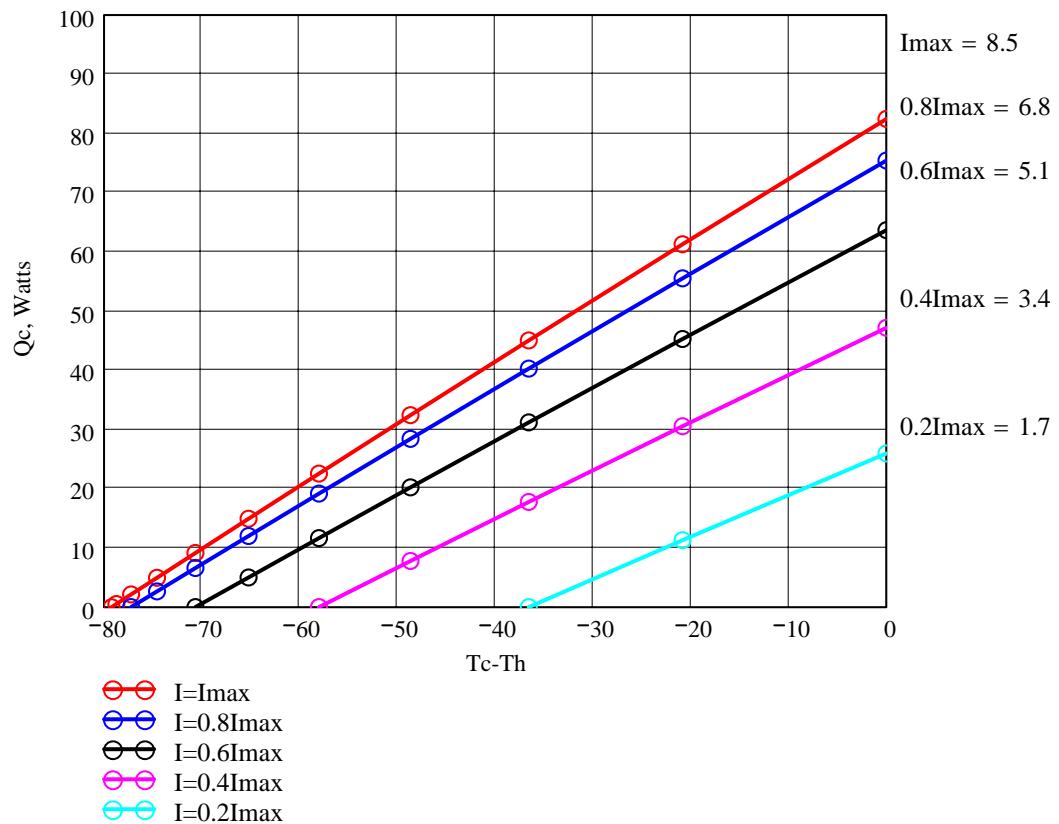
$Q_c$  - refrigerating capacity at cold side of the module (Watts),

$\Delta T = T_c - Th$  - temperature difference between cold and hot sides of the module (°C),

$I$  - DC current through the modules (Amps)

$V$  - voltage applied to the module (Volts).

Performance graphs for TM-127-1.4-8.5 modules at Th=50 °C  
 Environment: dry air, N<sub>2</sub>



$Q_c$  - refrigerating capacity at cold side of the module (Watts),

$\Delta T = T_c - T_h$  - temperature difference between cold and hot sides of the module (°C),

$I$  - DC current through the modules (Amps)

$V$  - voltage applied to the module (Volts).