

# Thermoelectric module TM - 31-1.4-8.5



## Performance Data

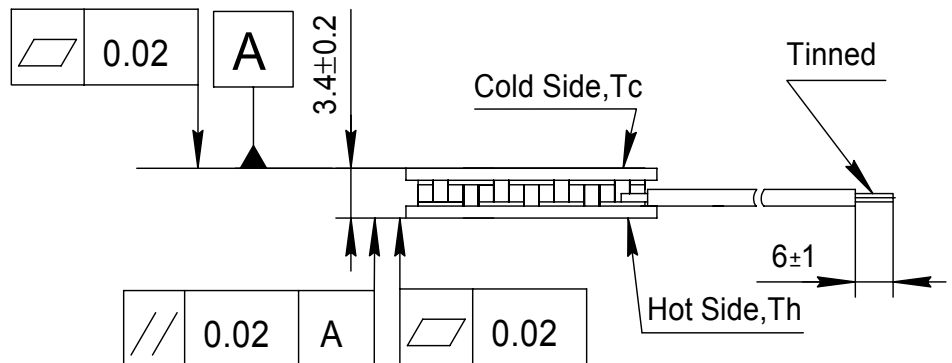
I <sub>max</sub> (amps)	8.5	$\Delta T = \Delta T_{max}$ . $T_h = 25 \pm 0.5$ °C.
V <sub>max</sub> (volts)	3.6	$T_h = 25 \pm 0.5$ °C. $\Delta T = \Delta T_{max}$ . $I = I_{max} \pm 0.1A$
$\Delta T_{max}$ (°C)	71	$T_h = 25 \pm 0.5$ °C. $I = I_{max} \pm 0.1A$
Q <sub>max</sub> (watts)	18.3	$T_h = T_c = 25 \pm 0.5$ °C. $I = I_{max} \pm 0.1A$
AC resistance (ohms)	0.37	$25 \pm 0.5$ °C.

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

Tolerances for thermal and electrical parameters  $\pm 10\%$

Drawing № ND 007.00.00

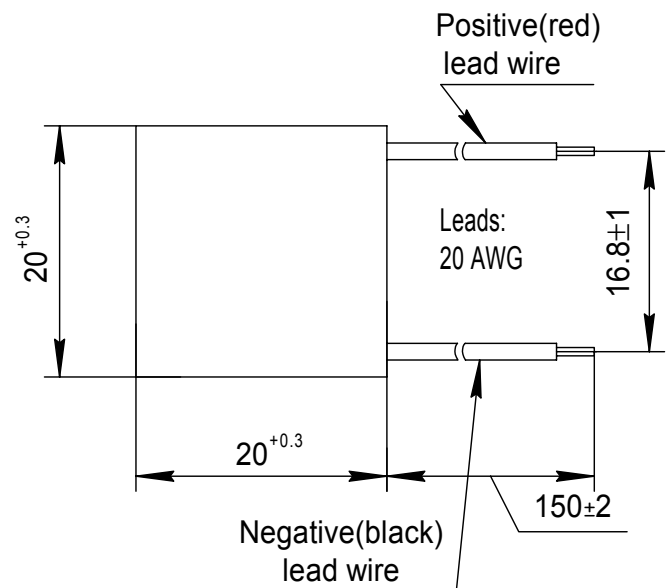
Dimensions in millimeters



## Options

Model Number	Description
TM-31-1.4-8.5 M	High reliable version on Cold Side

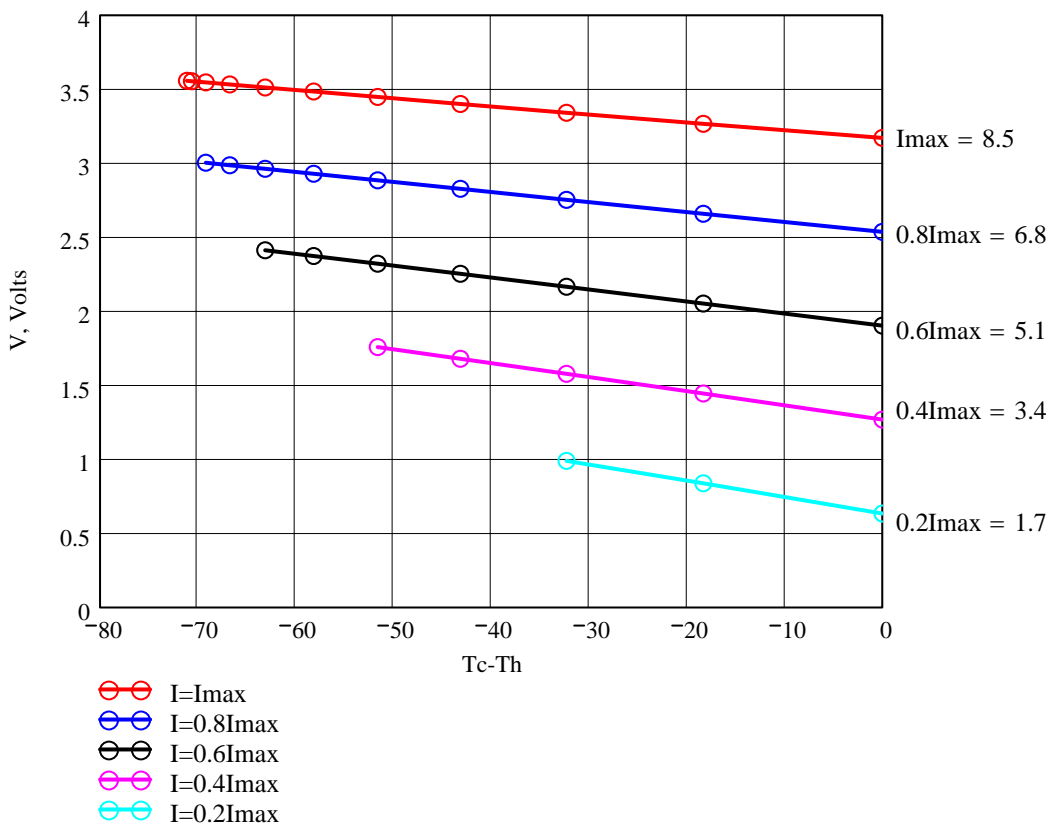
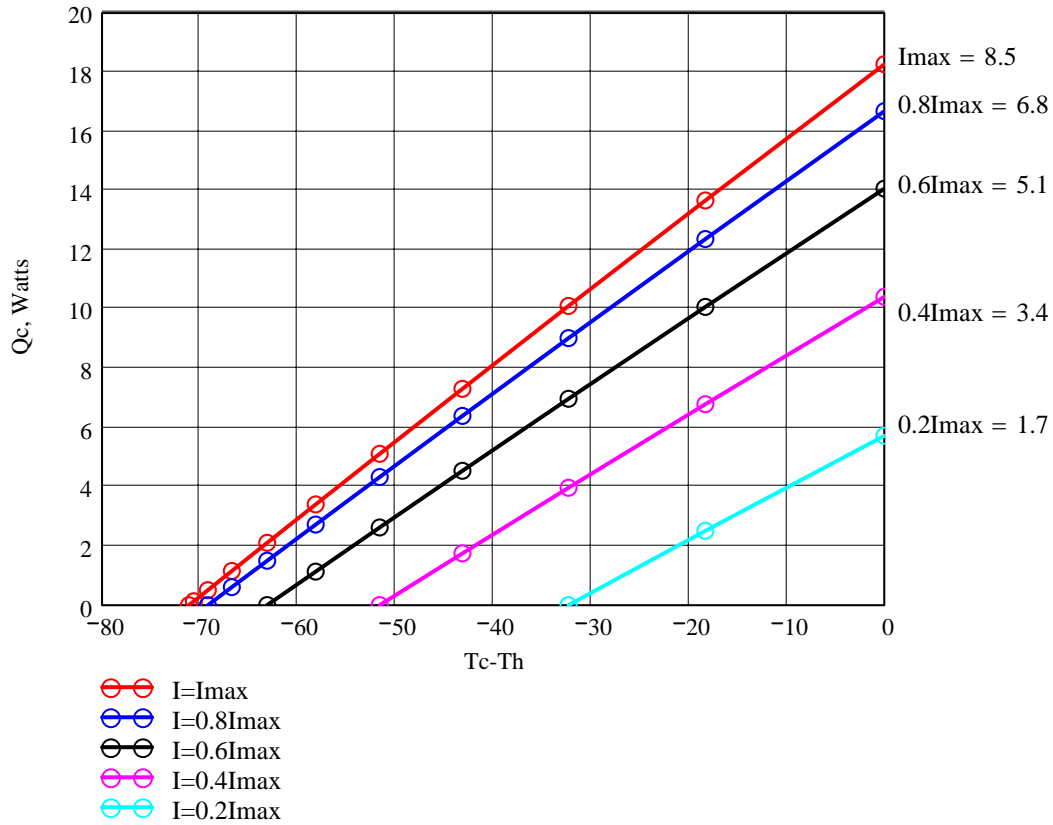
Lead wire insulation	Module maximum processing temperature
PVC	90°C
Silicone	200°C
PTFE	200°C



## Additional

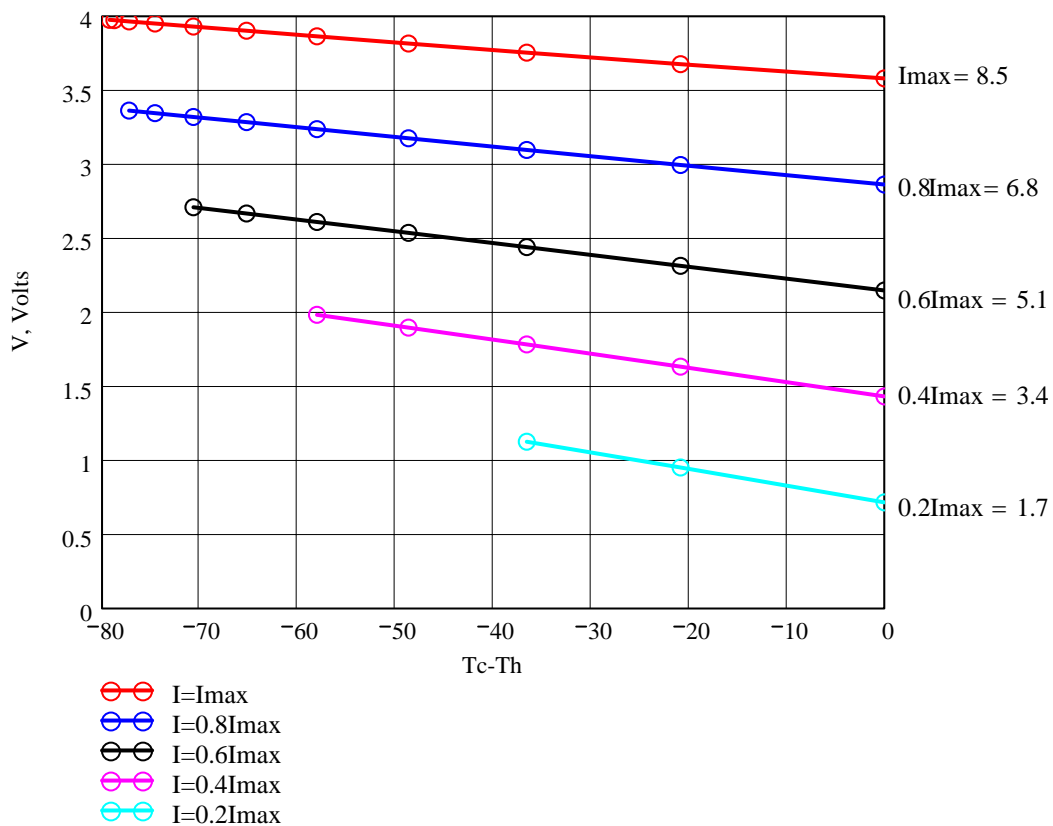
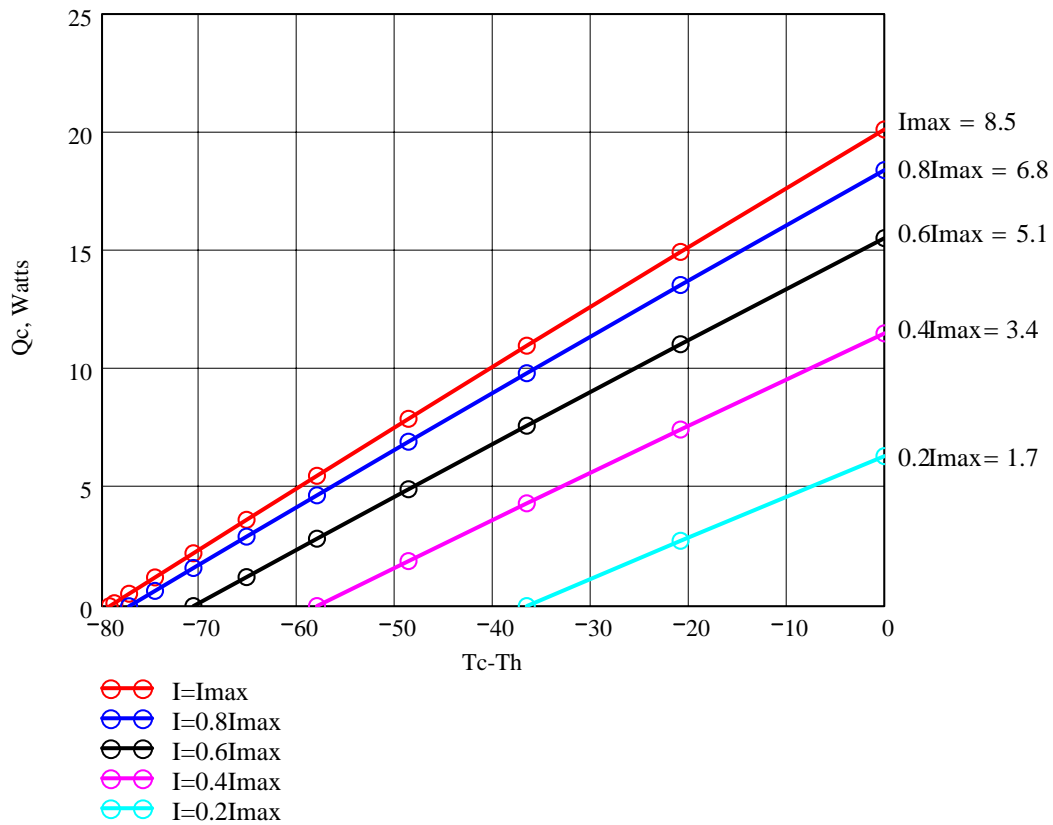
- RoHS 2002/95/EC compliant
- Cold Side and Hot Side Ceramics: Al<sub>2</sub>O<sub>3</sub>, white 96%
- Assembling Solder: SnSb, M.P. 232 °C ; SnCu M.P. 227 °C

Performance graphs for TM-31-1.4-8.5 modules at Th=25 °C  
 Environment: dry air, N<sub>2</sub>



Q<sub>c</sub> - refrigerating capacity at cold side of the module (Watts),  
 ΔT = T<sub>c</sub>-T<sub>h</sub> - 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-31-1.4-8.5 modules at Th=50 °C  
 Environment: dry air, N<sub>2</sub>



Q<sub>c</sub> -refrigerating capacity at cold side of the module (Watts),  
 ΔT=T<sub>c</sub>-T<sub>h</sub> - 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).