

# Thermoelectric module TM - 31-1.4-3.7



## Performance Data

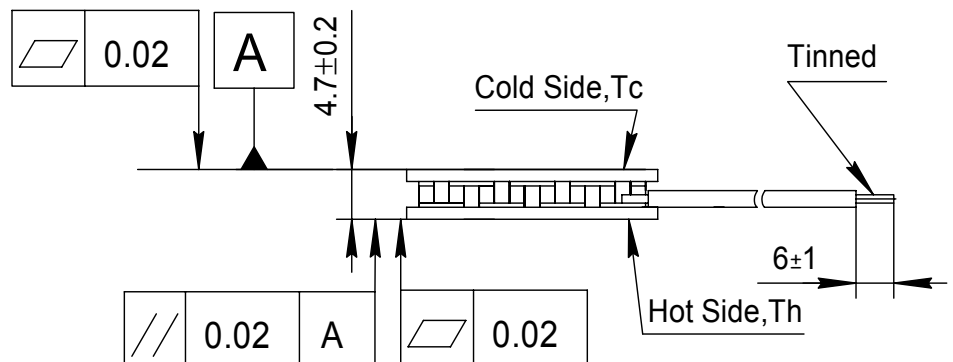
I <sub>max</sub> (amps)	4	$\Delta T = \Delta T_{max}$ . $T_h = 25 \pm 0.5 \text{ }^\circ\text{C}$ .
V <sub>max</sub> (volts)	3.5	$T_h = 25 \pm 0.5 \text{ }^\circ\text{C}$ . $\Delta T = \Delta T_{max}$ . $I = I_{max} \pm 0.1\text{A}$
$\Delta T_{max}$ ( $^\circ\text{C}$ )	71	$T_h = 25 \pm 0.5 \text{ }^\circ\text{C}$ . $I = I_{max} \pm 0.1\text{A}$
Q <sub>max</sub> (watts)	8.5	$T_h = T_c = 25 \pm 0.5 \text{ }^\circ\text{C}$ . $I = I_{max} \pm 0.1\text{A}$
AC resistance (ohms)	0.8	$25 \pm 0.5 \text{ }^\circ\text{C}$ .

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

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

Drawing № ND 037.00.00

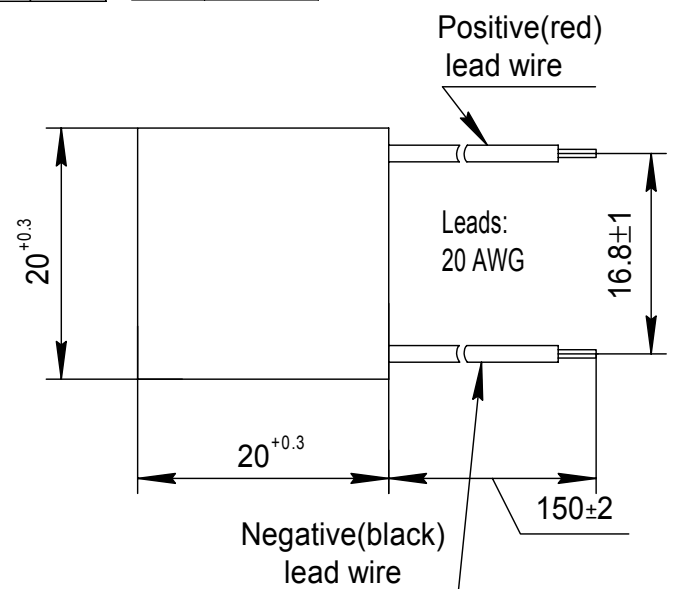
Dimensions in millimeters



## Options

Model Number	Description
TM-31-1.4-3.7 M	High reliable version on Cold Side

Lead wire insulation	Module maximum processing temperature
PVC	90 $^\circ\text{C}$
Silicone	200 $^\circ\text{C}$
PTFE	200 $^\circ\text{C}$



## Additional

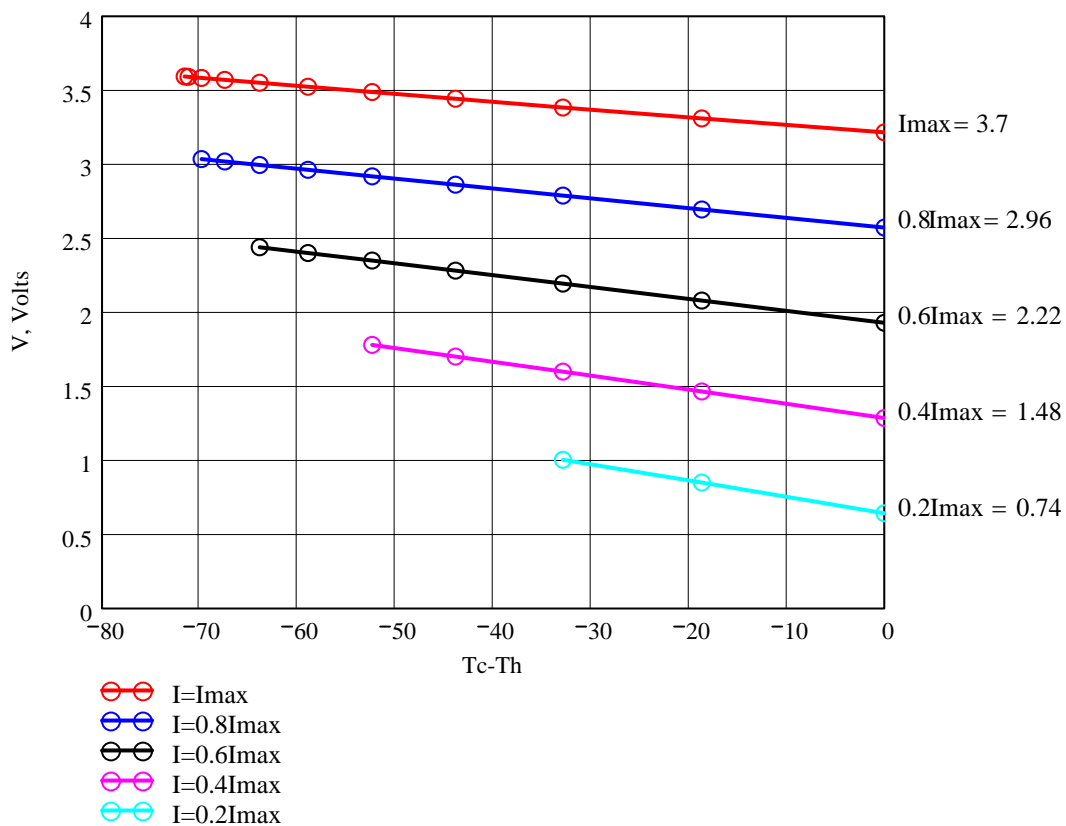
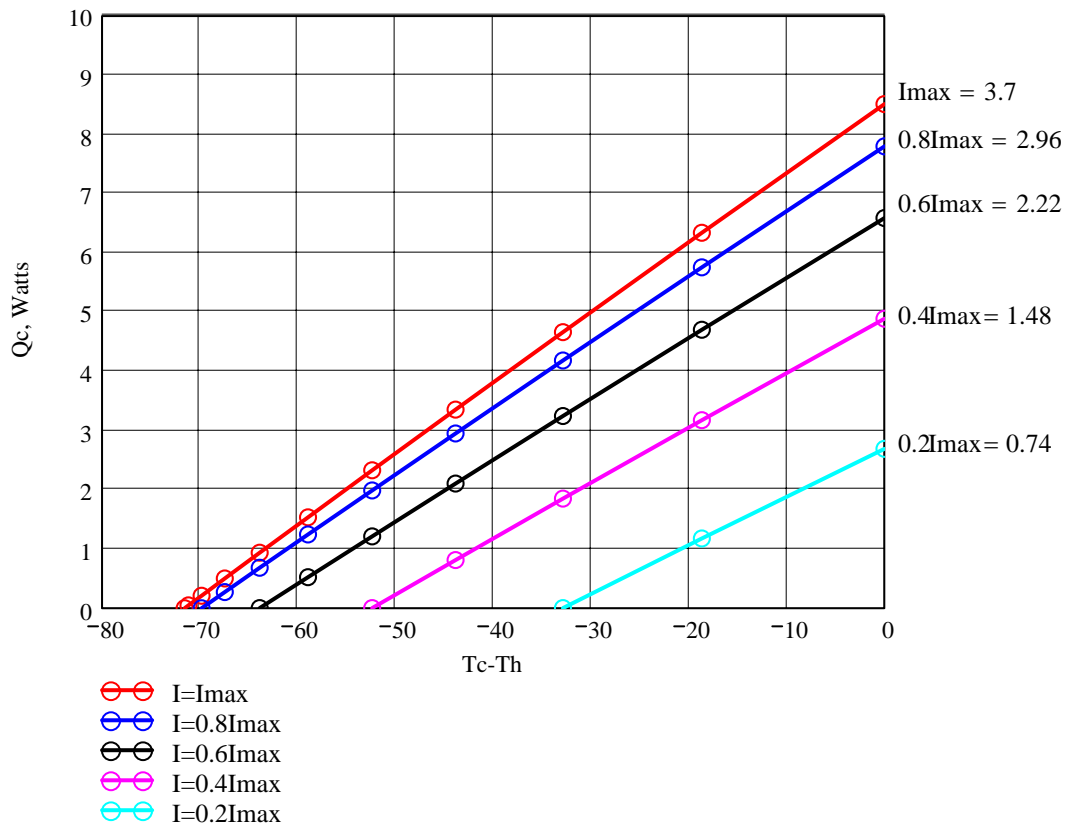
- RoHS 2002/95/EC compliant
- Cold Side and Hot Side Ceramics: Al<sub>2</sub>O<sub>3</sub>, white 96%
- Assembling Solder: SnSb, M.P. 232  $^\circ\text{C}$  ; SnCu M.P. 227  $^\circ\text{C}$

SCTB NORD, 3, Peschany Carrier, 109383 Moscow, Russia;

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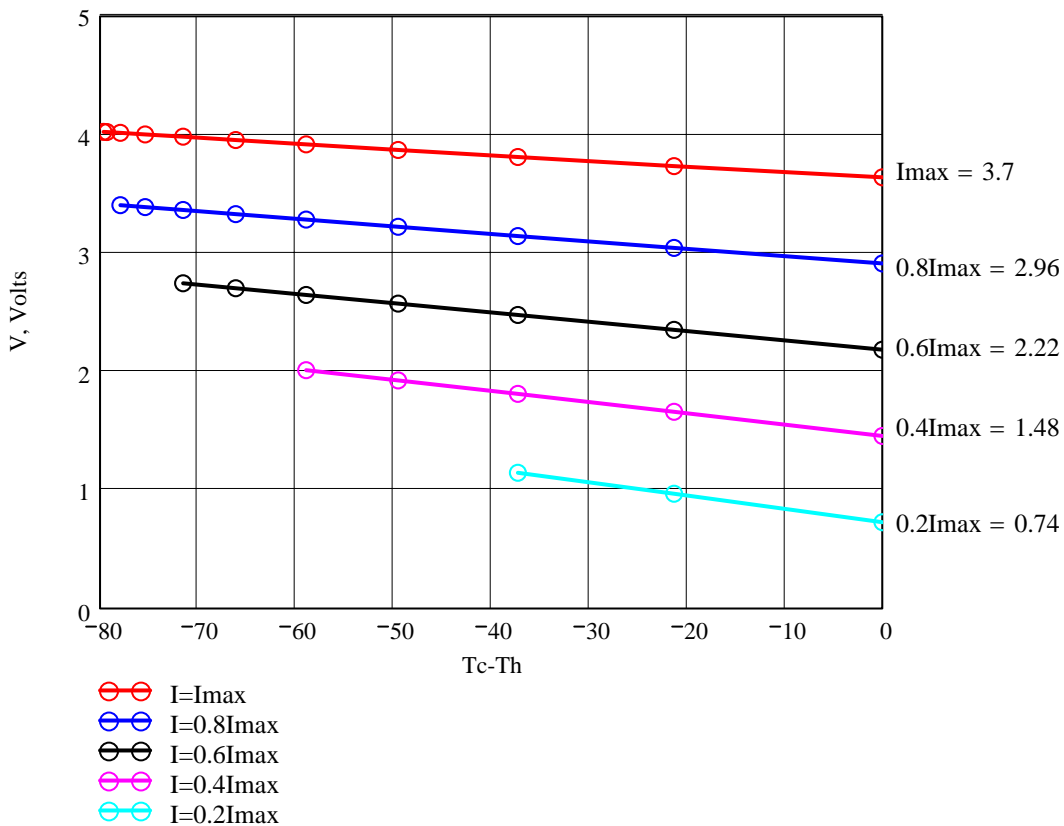
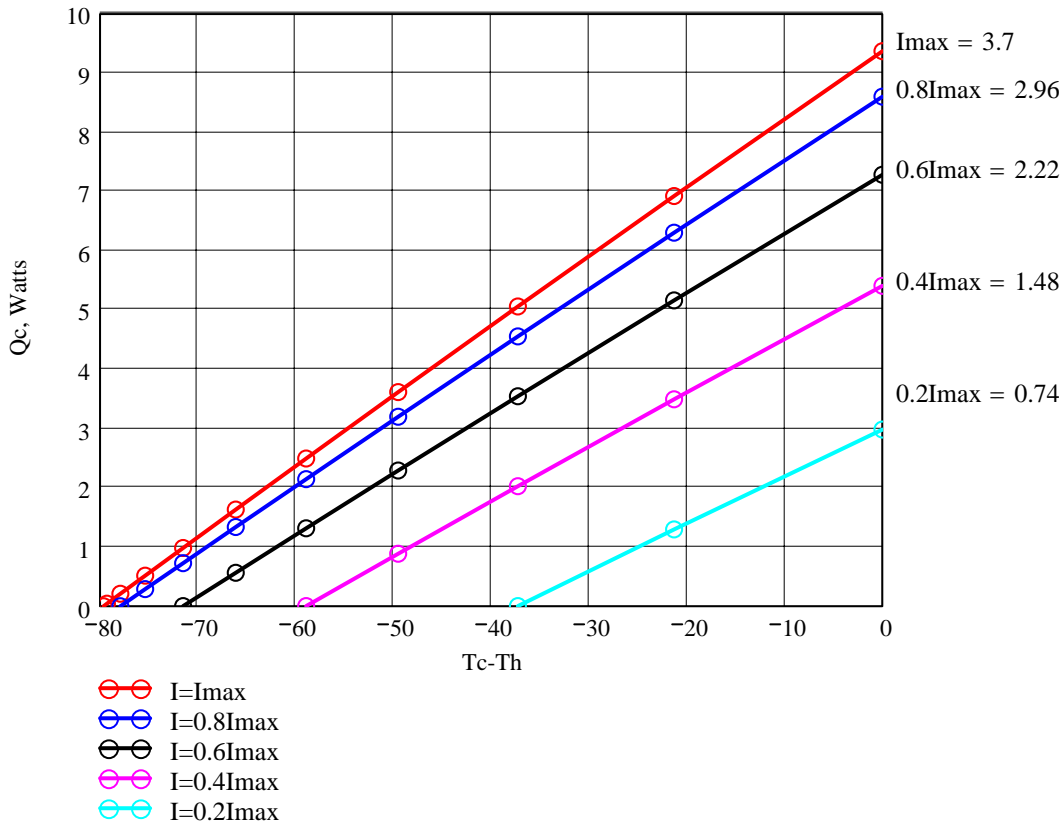
<http://www.sctbnord.com>; e-mail [info@sctbnord.com](mailto:info@sctbnord.com)

Performance graphs for TM-31-1.4-3.7 modules at Th=25 °C  
 Environment: dry air, N<sub>2</sub>



$Q_c$  -refrigerating capacity at cold side of the module (Watts),  
 $\Delta T = T_c - T_h$  - 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).

Performance graphs for TM-31-1.4-3.7 modules at  $T_h=50\text{ }^\circ\text{C}$   
 Environment: dry air,  $N_2$



$Q_c$  -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).