

# Thermoelectric module TM - 71-1.0-2.5



## Performance Data

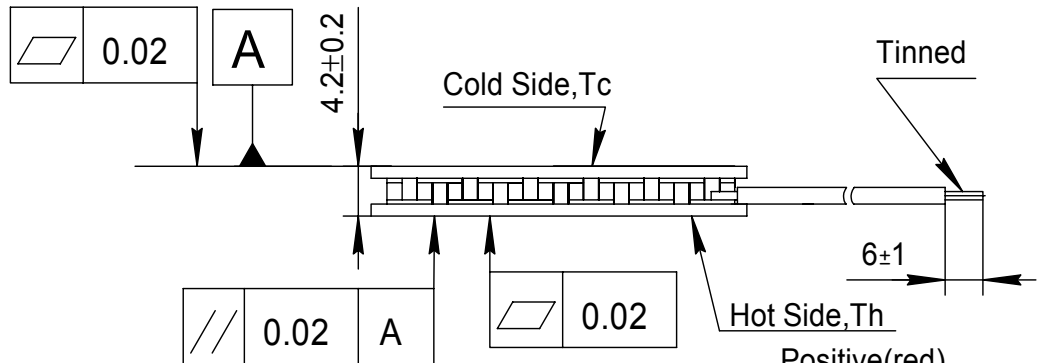
|                       |      |   |
|-----------------------|------|---|
| $I_{max}$ (amps)      | 2.7  | $\Delta T = \Delta T_{max}$ . $T_h = 25 \pm 0.5$ °C.                        |
| $V_{max}$ (volts)     | 8.1  | $T_h = 25 \pm 0.5$ °C. $\Delta T = \Delta T_{max}$ . $I = I_{max} \pm 0.1A$ |
| $\Delta T_{max}$ (°C) | 71   | $T_h = 25 \pm 0.5$ °C. $I = I_{max} \pm 0.1A$                               |
| $Q_{max}$ (watts)     | 13.1 | $T_h = T_c = 25 \pm 0.5$ °C. $I = I_{max} \pm 0.1A$                         |
| AC resistance (ohms)  | 2.7  | $25 \pm 0.5$ °C.  |

Environment: dry air,  $N_2$

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

Drawing № ND 069.00.00

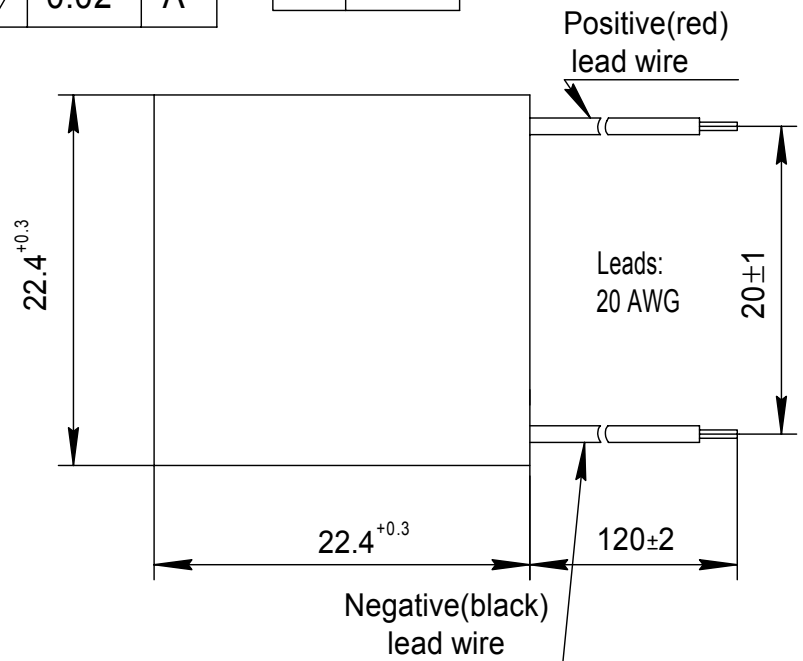
Dimensions in millimeters



## Options

| Model Number    | Description                        |
|-----------------|------------------------------------|
| TM-71-1.0-2.5 M | High reliable version on Cold Side |

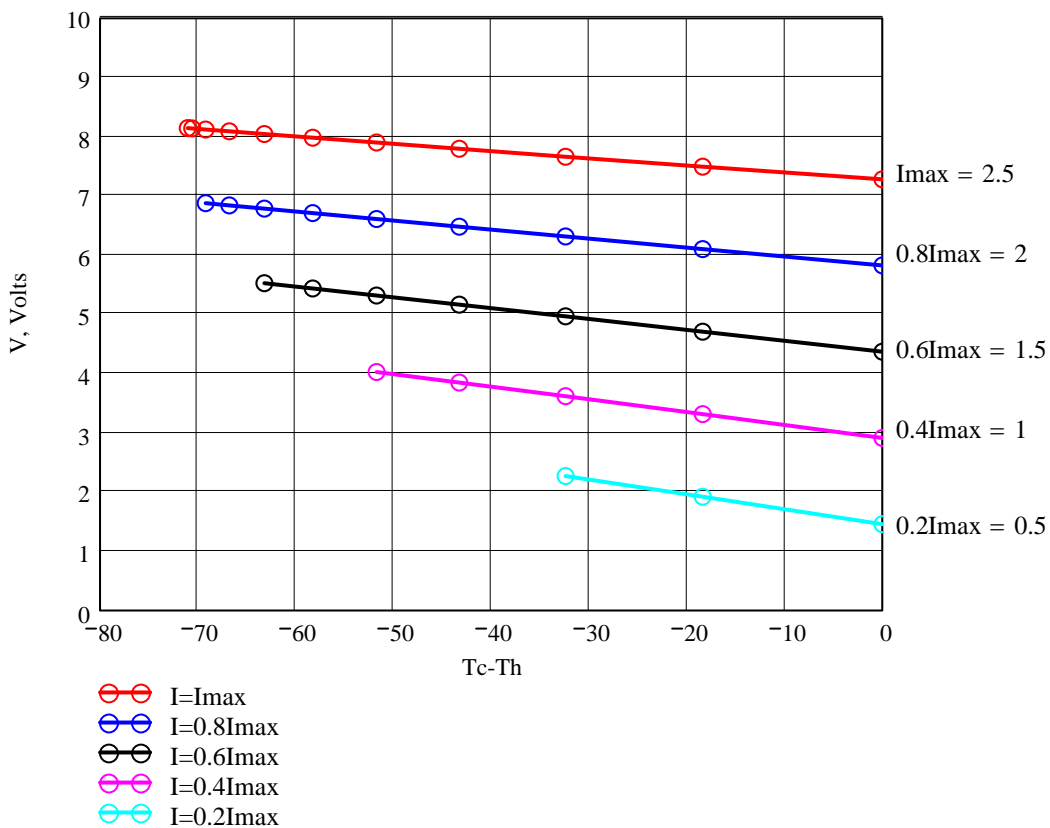
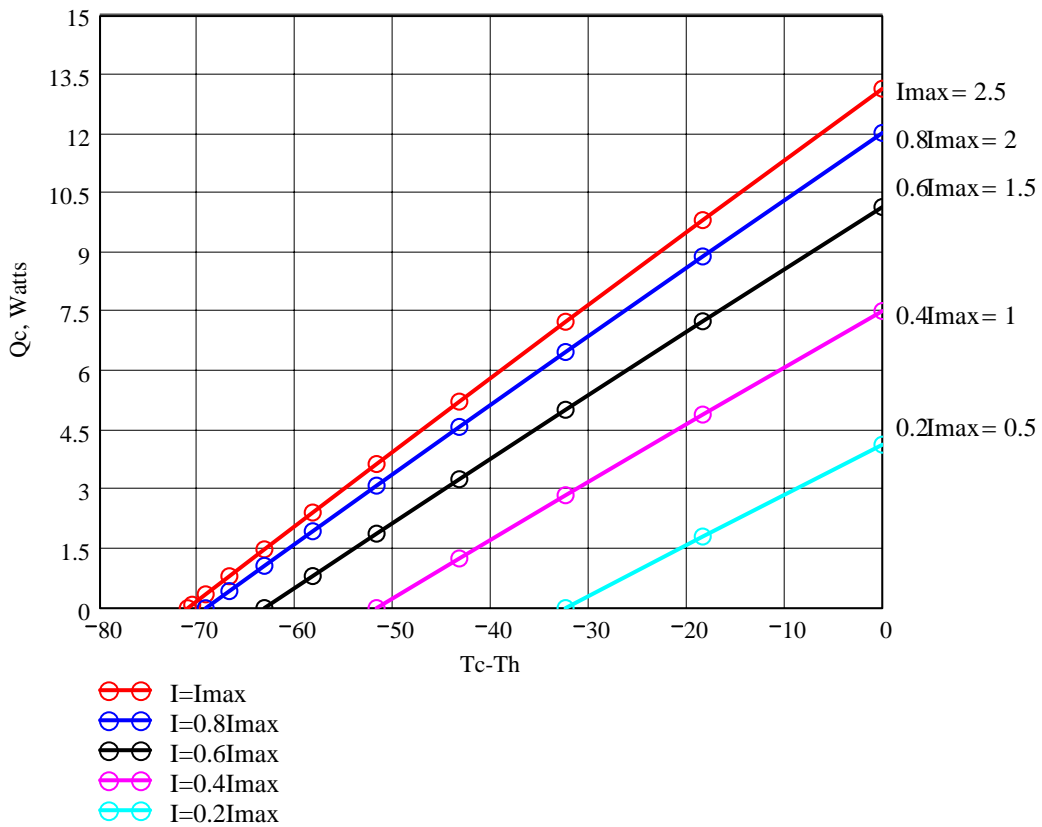
| Lead wire insulation | Module maximum processing temperature |
|----------------------|---------------------------------------|
| PVC                  | 90°C                                  |
| Silicone             | 200°C                                 |
| PTFE                 | 200°C          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



## Additional

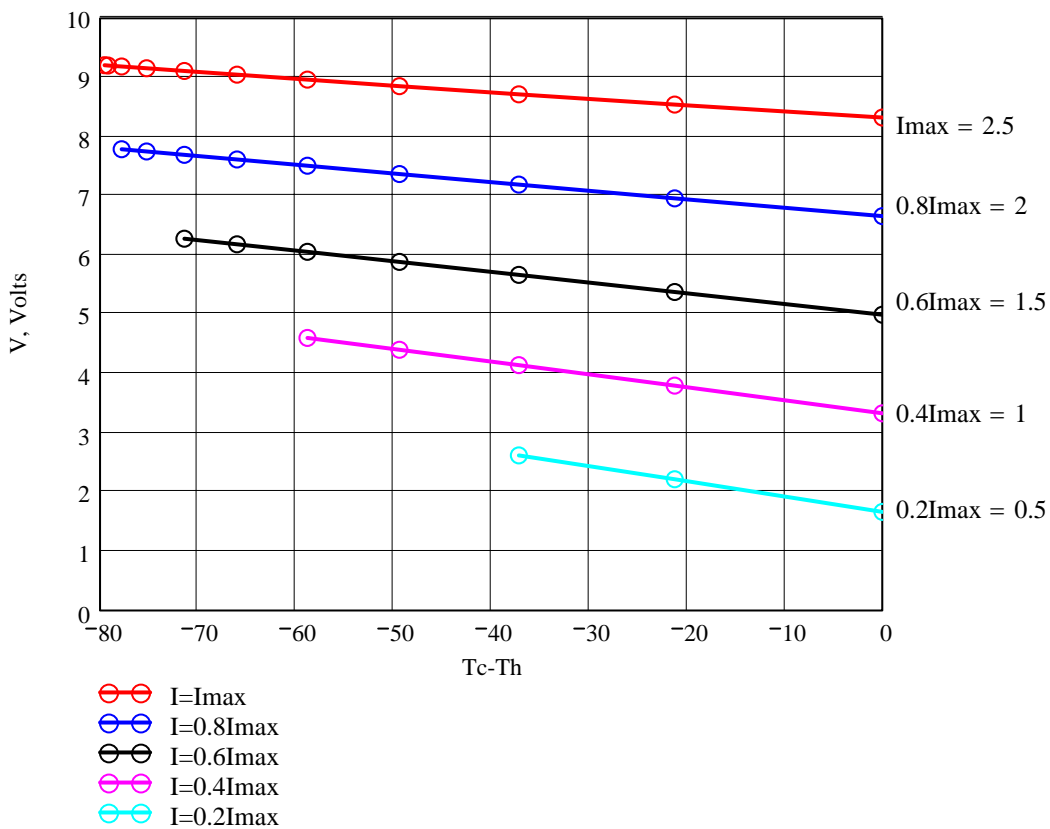
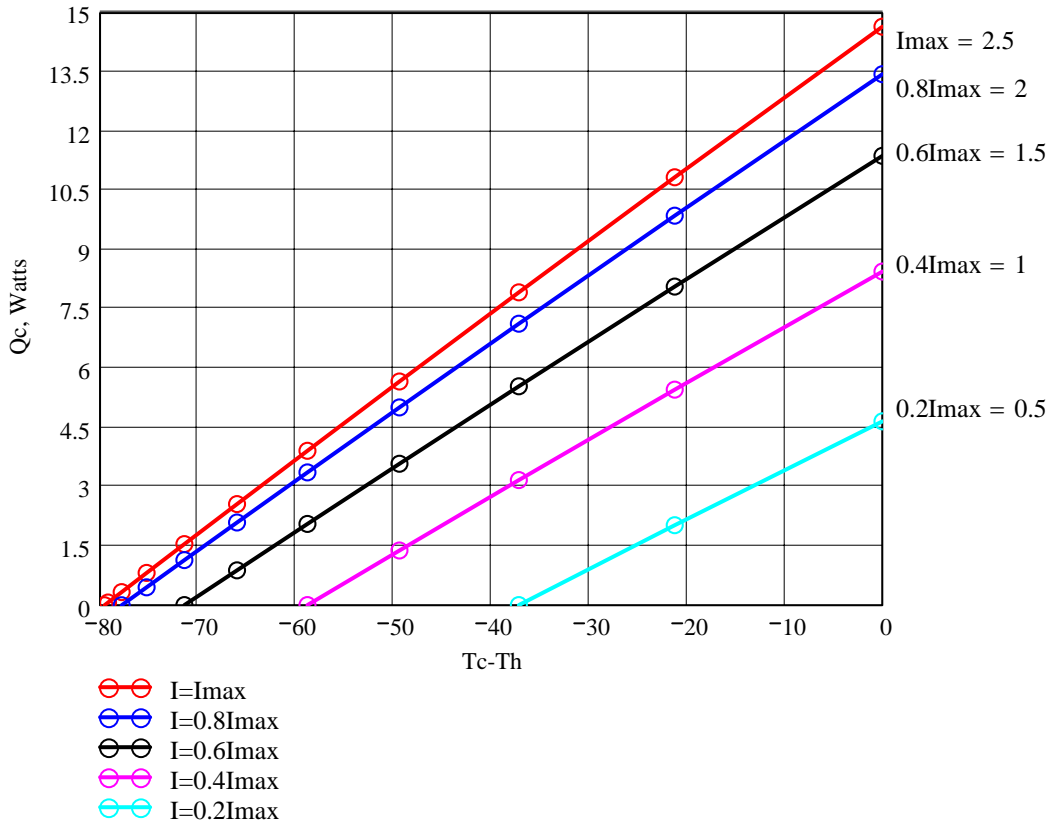
- RoHS 2002/95/EC compliant
- Cold Side and Hot Side Ceramics:  $Al_2O_3$ , white 96%
- Assembling Solder: SnSb, M.P. 232 °C ; SnCu M.P. 227 °C

Performance graphs for TM-71-1.0-2.5 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-71-1.0-2.5 modules at  $T_h=50\text{ }^\circ\text{C}$   
 Environment: dry air,  $\text{N}_2$



$Q_c$  - 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 ( $^\circ\text{C}$ ),  
 $I$  - DC current through the modules (Amps)  
 $V$  - voltage applied to the module (Volts).