Thermoelectric module   QC-63-1.0-3.9

Perfomance Data
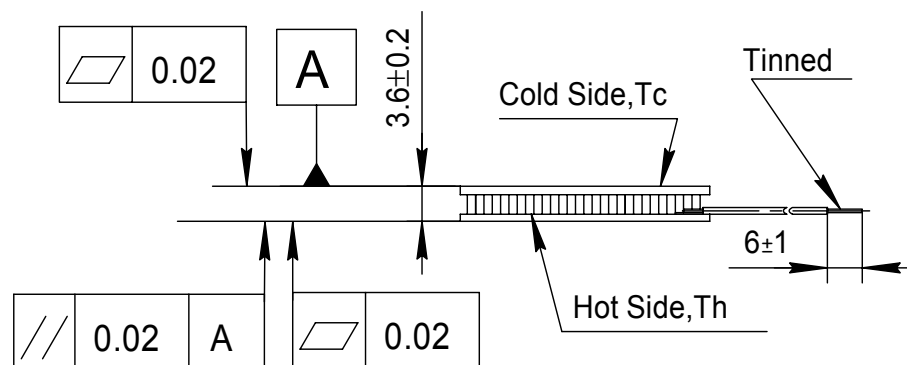
Imax (amps)	4.2	$\Delta T=\Delta Tmax.$ Th=25 $\pm$ 0.5 $^{\circ}$C.
Vmax (volts)	7.2	Th=25 $\pm$ 0.5 $^{\circ}$C. $\Delta T=\Delta Tmax.$ I=Imax $\pm$ 0.1A
$\Delta Tmax$ ($^{\circ}$C)	71	Th=25 $\pm$ 0.5 $^{\circ}$C. I=Imax $\pm$ 0.1A
Qmax (watts)	18.3	Th=Tc=25 $\pm$ 0.5 $^{\circ}$C. I=Imax $\pm$ 0.1A
AC resistance (ohms)	1.5	25 $\pm$ 0.5 $^{\circ}$C.

Environment: dry air, N_2

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

Drawing   № ND 004.00.00

Dimensions in millimeters

Options

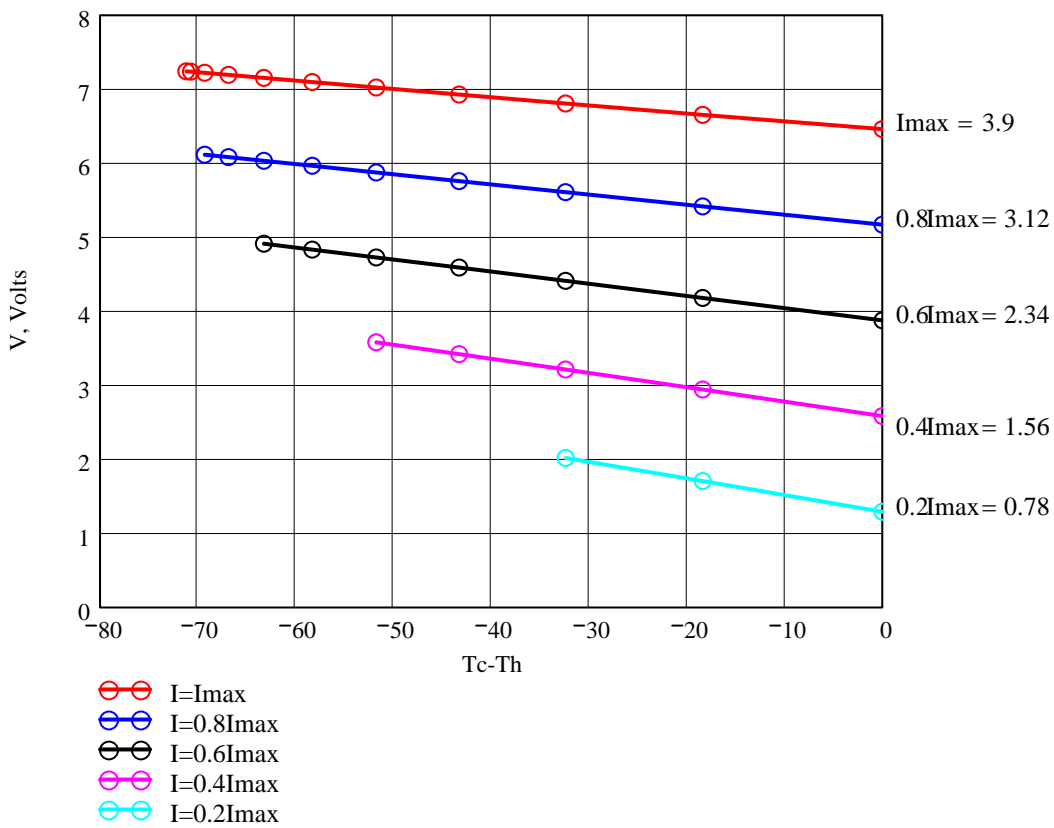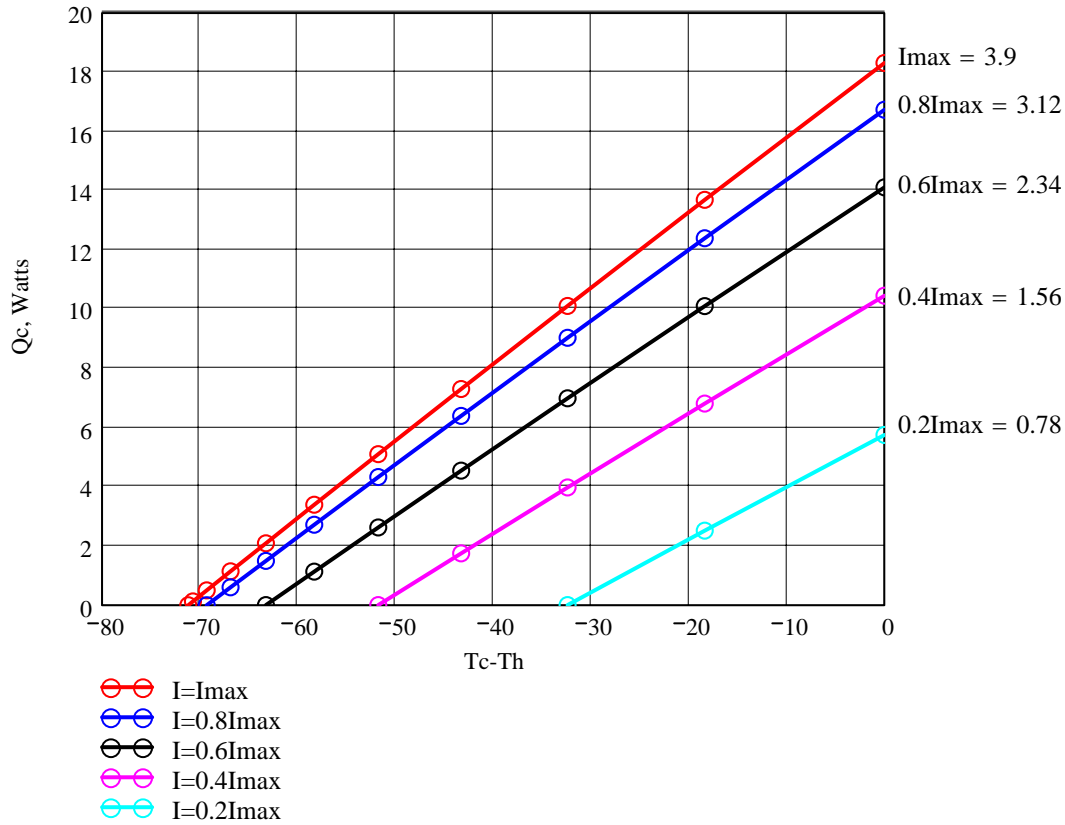| Model Number	Description
TM-63-1.0-3.9 M	High reliable version on Cold Side

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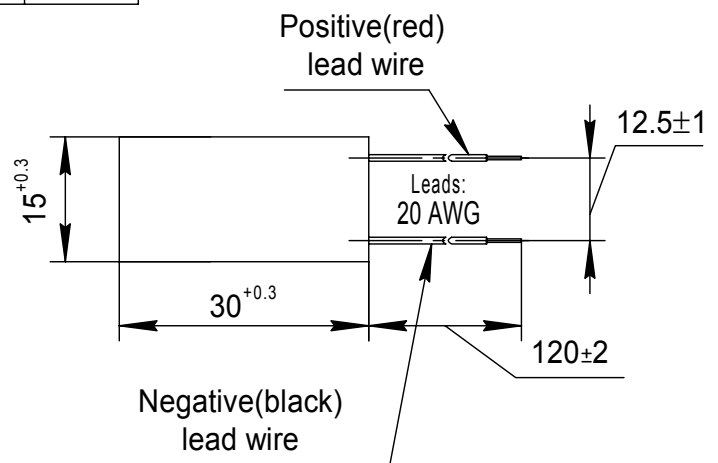
Additional

- RoHS 2002/95/EC compliant
- Cold Side and Hot Side Ceramics: Al2O3, white 96%
- Assembling Solder: SnSb, M.P. 232 $^{\circ}$C ; SnCu M.P. 227 $^{\circ}$C

Performance graphs for QC-63-1.0-3.9 modules at Th=25 °C
Environment: dry air, N_2

Legend for upper graph (Qc, Watts vs Tc-Th):
- Imax = 3.9
- 0.8Imax = 3.12
- 0.6Imax = 2.34
- 0.4Imax = 1.56
- 0.2Imax = 0.78

- I=Imax
- I=0.8Imax
- I=0.6Imax
- I=0.4Imax
- I=0.2Imax

Legend for lower graph (V, Volts vs Tc-Th):
- Imax = 3.9
- 0.8Imax = 3.12
- 0.6Imax = 2.34
- 0.4Imax = 1.56
- 0.2Imax = 0.78

- I=Imax
- I=0.8Imax
- I=0.6Imax
- I=0.4Imax
- I=0.2Imax

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

$\Delta T = Tc - Th$ - 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 QC-63-1.0-3.9 modules at Th=50 °C
Environment: dry air, N$_2$
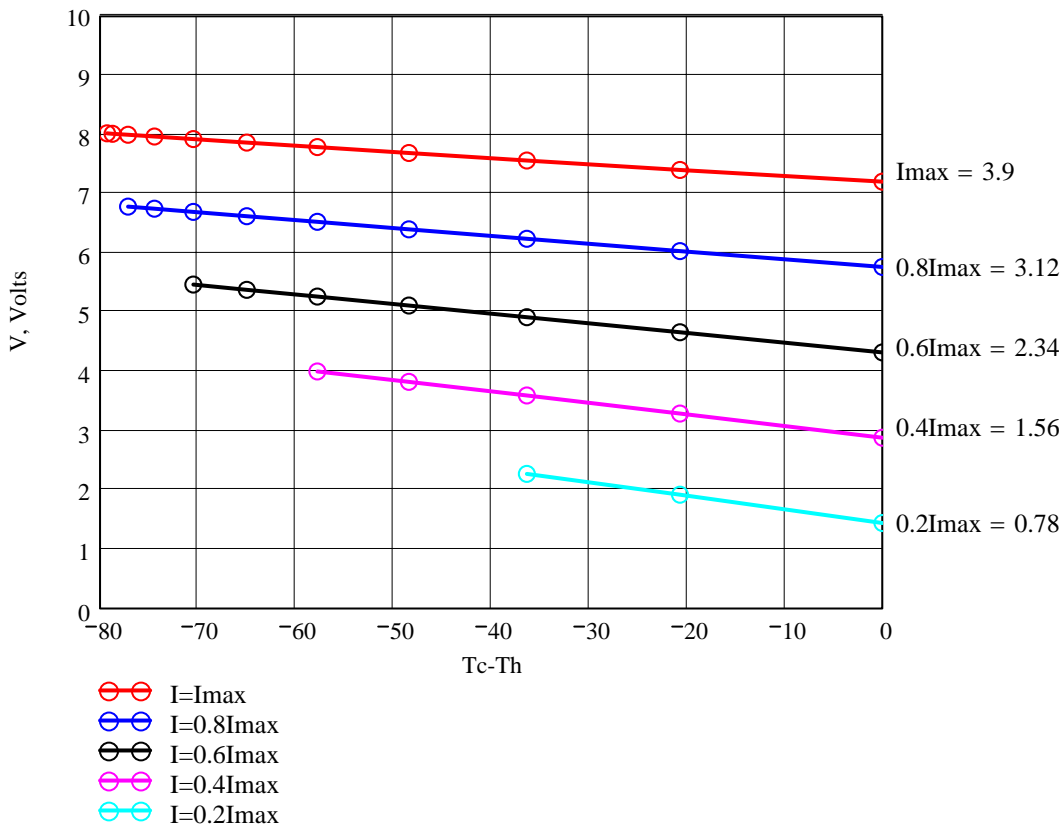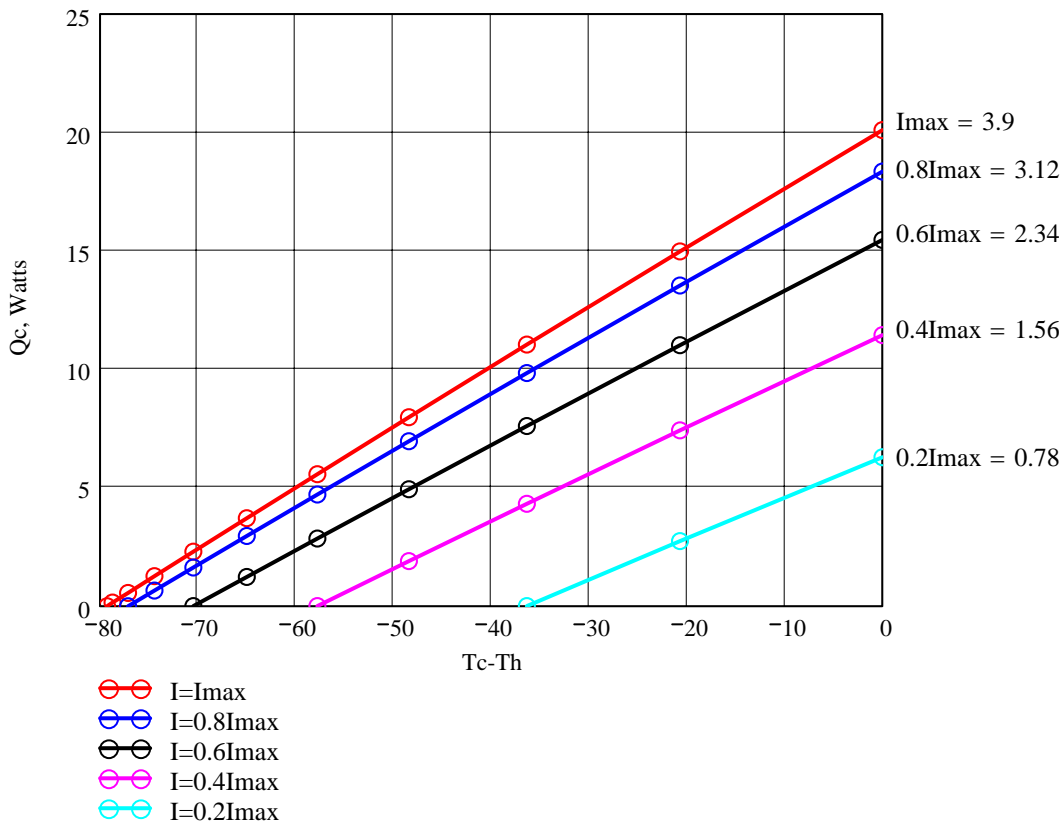
Qc -refrigerating capacity at cold side of the module (Watts),

ΔT=Tc-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).