

Specification of Thermoelectric Module

TEC2-127-65-04

Description

The TEC2-127-65-04 is a multistage module designed for greater temperature differential cooling, good for cooling and heating up to 100°C applications. It is a 127-65 couples module in size of 40mm×40mm (top)/40mm×40mm (bottom). If higher operation or processing temperature is required, please specify, we can design and manufacture according to your special requirements.

Features

- High Temperature Differential
- No moving parts, no noise, and solid-state
- Compact structure, small in size, light in weight
- Environmental friendly
- RoHS compliant
- Precise temperature control
- Exceptionally reliable in quality, high performance

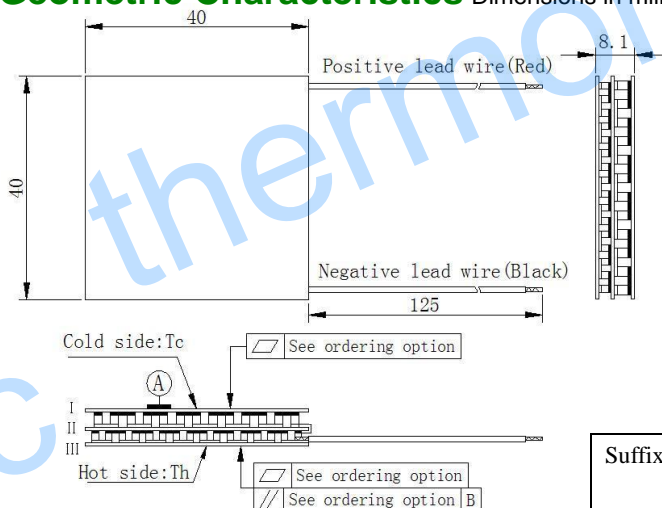
Application

- Infrared (IR) Sensors
- CCD Sensor
- Gas Analyzers
- Calibration Equipment
- CPU cooler and scientific instrument
- Photonic and medical systems
- Guidance Systems

Performance Specification Sheet

Th(°C)	27	50	Hot side temperature at environment: dry air, N ₂
DT _{max} (°C)	90	100	Temperature Difference between cold and hot side of the module when cooling capacity is zero at cold side
U _{max} (Voltage)	14.6	16.4	Voltage applied to the module at DT _{max}
I _{max} (amps)	4.2	4.2	DC current through the modules at DT _{max}
Q _{Cmax} (Watts)	25.0	27.5	Cooling capacity at cold side of the module under DT=0°C
AC resistance(ohms)	3.1~3.4	3.4~3.8	The module resistance is tested under AC

Geometric Characteristics Dimensions in millimeters



Sealing Option

Suffix	Sealant
NS	No sealing
SS	Silicone sealant
EPS	Epoxy
OS	other than above

Ordering Option

Suffix	Thickness (mm)	Flatness/ Parallelism (mm)	Lead wire length(mm) Standard/Optional length
TF	0: 8.1±0.15	0: 0.035/0.035	125±1/Specify
TF	1: 8.1±0.10	1: 0.025/0.025	125±1/Specify
TF	2: 8.1±0.05	2: 0.015/0.015	125±1/Specify

Eg. TF01: Thickness 8.1±0.15(mm) and Flatness/ Parallelism (mm): 0.025/0.025

Additional

Ceramic material: Alumina (Al₂O₃, white 96%)
Solder tinning: Bismuth Tin (BiSn) M.P. 138°C