Product description:

The TEC1-12703 30x30mm Thermoelectric Cooler 3A Peltier Module is the simple application of the Peltier Thermoelectric Effect. The module features 127 semiconductor couples in the area of 30mmx30mm.

Thermoelectric coolers also are known as TEC or Peltier Module create a temperature differential on each side. One side gets hot and the other side gets cool. Therefore, they can be used to either warm something up or cool something down, depending on which side you use. You can also take advantage of a temperature differential to generate electricity.

This Peltier works very well as long as you remove the heat from the hot side. After turning on the device, the hot side will heat quickly, the cold side will cool quickly. If you do not remove the heat from the hot side (with a heat sink or other device), the Peltier will quickly reach stasis and do nothing. We recommend using an old computer CPU heatsink or another block of metal to pull heat from the hot side. We were able to use a computer power supply and CPU heatsink to make the cold side so uncomfortable we could not hold our finger to it.

A thermoelectric cooling (TEC) module is a semiconductor-based electronic component that functions as a small heat pump. By applying the DC power source to a TEC, heat will be transferred from one side of the module to the other. It creates a cold and hot side. They are widely used in industrial areas, for example, computer CPU, CCDs, portable refrigerators, medical instruments, and so on.

Also Known as Thermoelectric cooling modules, Thermoelectric modules, Peltier modules, Thermoelectric cooling module

Specification:

- Model number: TEC1-12703; Operating Voltage: 12V
- Maximum Voltage- Umax (V) : 15V; Maximum Current- Imax (A) : 3A
- Maximum Power: 24W
- Power Cord: 100mm; Quality tested cooling cells, Solid-state, vibration-free, noise-free.
- Important Note!! Heat side requires heat sink all the time. “ Do not run this device with a power supply more than a few seconds without a heatsink mounted to the device! ”

Operating Tips:

- Do not exceed Imax or Vmax when operating a module.
- Please carry out moisture protection options (sealing) in final application use.
- Life expectancy: 200,000 hours.
- Failure rate based on longtime testings: 0.2%.