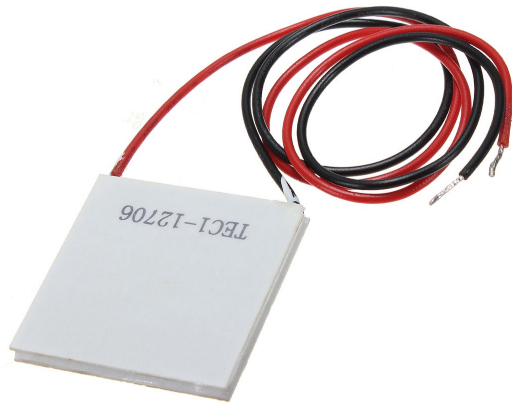




TEC1-12706 12V 60W Thermoelectric (Peltier) Cooler Plate Module



This TEC1-12706 60W 12V Peltier thermoelectric cooler is perfect for application requiring heating or cooling such as small DIY refrigerators, custom drink heaters/coolers and electronic component and device chillers or heaters.

TECs work very well as long as you remove the heat from the hot side. After turning on the device, the hot side will heat quickly, and the cold side will cool quickly. If you do not remove the heat from the hot side with a heat sink or other cooling device, the Peltier will quickly reach equilibrium and will no longer cool.

This TEC must be mounted to a heat sink using an ample layer of thermal compound or double-sided thermal tape between the TEC and heatsink. Do not apply power to it before mounting it to a heatsink. Failure to do so may damage the device, and will present a burning hazard (the heating side will get very hot, quickly). When first using the device, limit the voltage and/or current while monitoring the TEC's temperature. If the heatsink gets hot to the touch, or the "cold" side stops cooling and gets hot, immediately reduce the input power, and/or increase the device's cooling by providing airflow across the heatsink or by using a larger one.

The maximum power (voltage x current) applied to this device must not exceed 60 Watts, and at this power level will require a large air- or water-cooled heatsink capable of dissipating >60W in order to remove the heat from the device.

TEC1-12706 Specifications

- Model: TEC1-12706
- Size: 40mm x 40mm x 4mm
- Working current: Typically 3-4 A (rated 12V); I_{max}: 6A
- Rated voltage: 12V DC, V_{max}: 15V
- Operates from 0~15V DC and 0~6A at up to 60W maximum power (requires adequate heatsinking)
- Operating Temperature: -30°C to 70°C
- Maximum Power Consumption: 60 Watts
- Refrigeration Power Q_{cmax}: ~50W
- Fitted with 12-inch (approx.) insulated leads
- The side with lettering is the cooling side, and the blank side is the heating side.

References:

TEC Installation Instructions: <https://www.electracool.com/install.htm>

Thermoelectric Heat Pumps: <https://www.colorado.edu/engineering/ASEN/asen5519/10tec.htm>