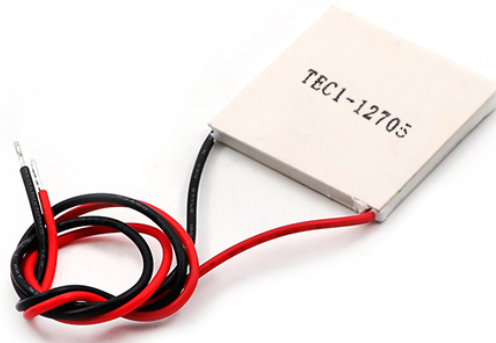


# ***Peltier Thermoelectric Cooling Module***

***Model: TEC1 -12705***



## **Description:**

Utilized in high-end consumer, commercial-grade applications for extreme performance and maximum energy efficiency, TEC1 Peltier Modules provide unmatched temperature differentials (DTmax) in cooling or heating applications.

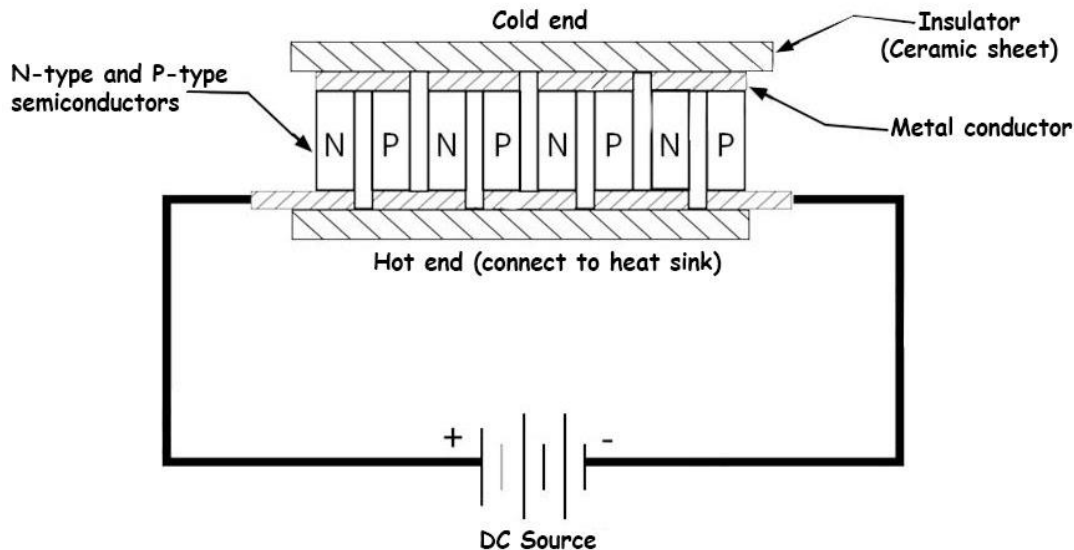
TEC1-12705 Peltier Modules measure **40x40x3.8mm** and offer 68°C Delta T max (DTmax) at a maximum operating temperature of 138°C.

Capable of performing to exacting specifications, cooling or heating with precision in extreme environments, TEC1 Peltier Modules have rapidly become an industry standard for numerous exacting thermoelectrics.

## **Specifications:**

<b>Type Peltier element:</b>	TEC (Thermoelectric cooler)
<b>Design:</b>	Without silicone sealed
<b>Max. Temperature:</b>	138°C
<b>Max. Voltage:</b>	15.4V
<b>Max. Current:</b>	5.3A
<b>Resistance:</b>	2.2 Ohm
<b>Qmax. @ Delta T=0:</b>	57W
<b>Delta T max.:</b>	68°C
<b>P-N Junction:</b>	127 couples
<b>Material:</b>	Al <sub>2</sub> O <sub>3</sub> (Aluminum Oxide)
<b>Wire Size:</b>	18AWG
<b>Wire Length:</b>	150mm
<b>Wire Insulation Material:</b>	Teflon
<b>Weight:</b>	29g
<b>Size:</b>	40x40x4mm

### Structure and Wiring Diagram:



### Applications:

When coupled with an appropriate heat sink and power source, TEC1 Peltier Modules are suitable for the following applications...

- **Liquid Component Cooling** - Ideal for performance PC applications, TEC1 Peltier Modules are tested to cool CPUs and GPUs to extreme temperatures when used in conjunction with 12V PSU rails and optimized CPU heat sinks.
- **Food and Beverage Refrigeration** - Precision temperature management allows for use in temperature sensitive food and beverage refrigeration applications requiring exacting cooling (or heating).
- **Commercial Portable Cooling** - Approved for use in commercial transport, TEC1 Peltier Modules can be applied to manage DTmax temperatures of up to 68°C.
- **Temperature Stabilization** - Stabilize volatile temperatures with ease and superior energy efficiency when paired with a precision Peltier control module.
- **Precision Temperature Control** - For research laboratories, universities, or any precision temperature control situation with a range of up to 68°C, TEC1 Peltiers provide unparalleled control.
- **Medical and Photonic Systems** - Trusted in thousands of medical and photonic systems applications, TEC1 Peltier Modules offer premier precision temperature control - even in extreme temperature differentials - few coolers can match.

*Made in China*