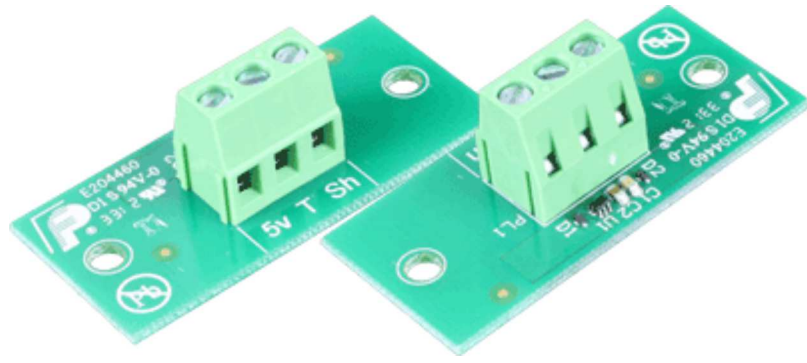


TSA01 - Analog Temperature Sensor



The TSA01 is a voltage output temperature sensor module employing Microchip's MCP9700A sensor.

Specification

Operating Voltage	2.3v to 5.0v
Operating Current	6uA (typical)
Output	10.0 mV/°C (typical)
Output Voltage at 0°C	500mV
Range	40°C to +125°C
Accuracy	±1°C (typ.) ±2°C (max.), 0°C to +70°C

Connectivity

The TSA01 should be connected to your controller using **shielded twin core cable**.

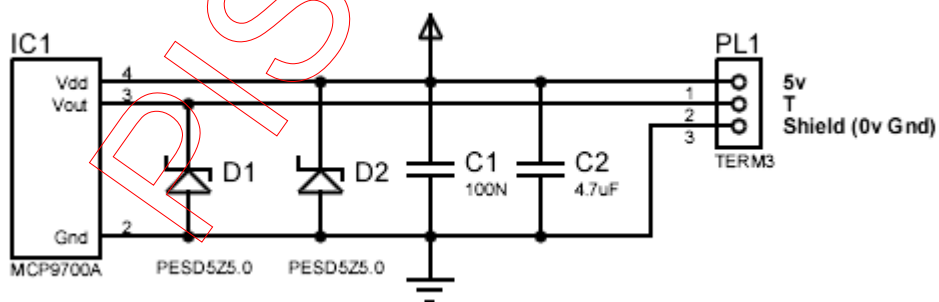
The shield is the 0v ground connection.

One of the cores carries the supply voltage, marked as 5v on the PCB.

The other core carries the temperature voltage, marked as T on the PCB.

Do not power the module from a higher voltage as there are ESD protection diodes on the board that start conducting at around 6v.

Schematic



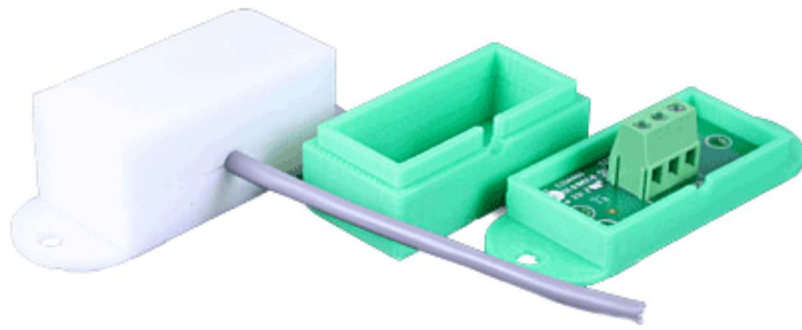
Enclosure

We do not supply an enclosure for these, however you do have a couple of choices.

The module is designed to fit a Schneider NSYTBS775 enclosure (RS 2550359430).

If you have access to a 3D printer then you may print your own case from the following STL files.

[Base.stl](#) [Lid.stl](#)



After wiring and testing the case is glued together and sealed.

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