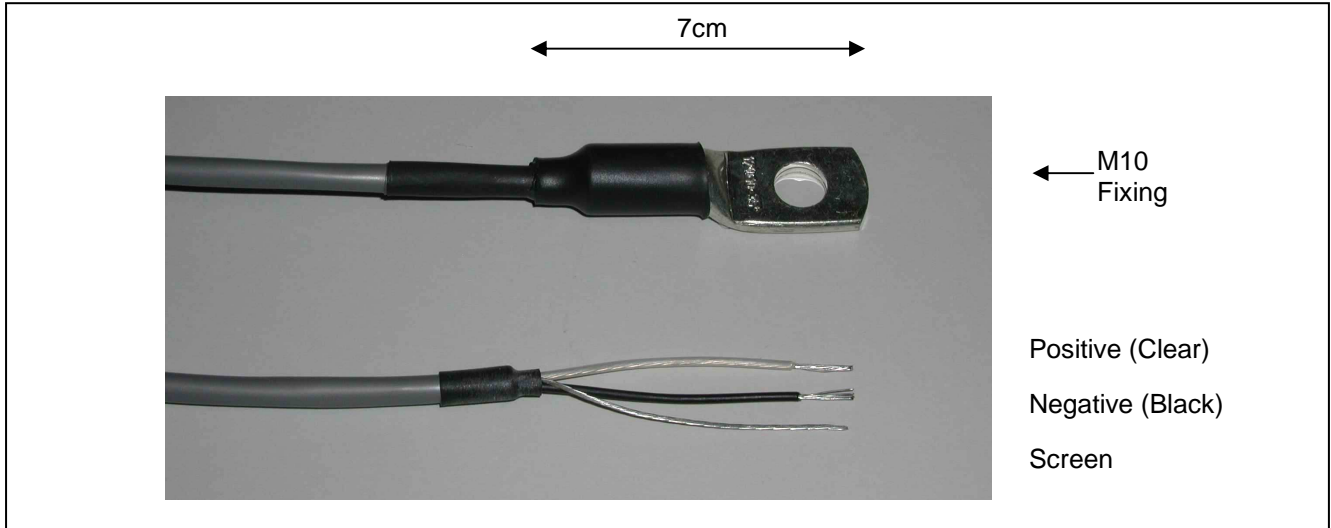
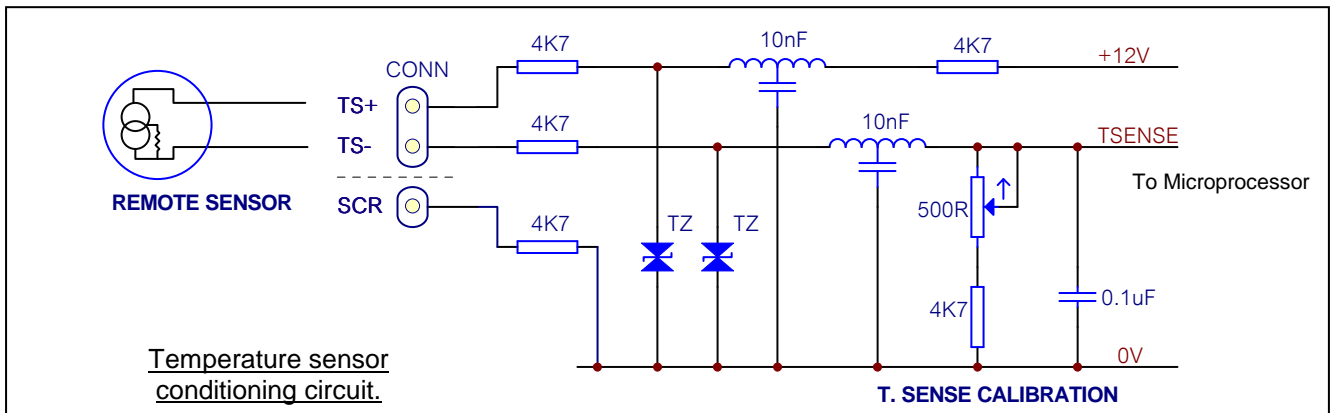


The **MSRx Temperature Sensor** is encapsulated in a robust housing, suitable for fitting within a battery enclosure or directly to battery terminals for accurate battery temperature monitoring. It is supplied with a 10m cable as standard which may be easily cut to the appropriate length.



The sensing circuit utilizes the temperature characteristics of the LM334 Current Generator IC from National Semiconductor. Based on passing a current proportional to temperature, it is more immune to external interference than equivalent voltage sourcing temperature transducers. The use of the screen, which is not electrically connected to either the sensing wires or the housing, is optional but recommended. It may be connected to an adjacent terminal marked "SCR" which is connected to the circuit 0V via a 4K7 resistor.



The sensor passes $1\mu\text{A}/\text{K}$ which is equivalent to $273.2\mu\text{A}$ at 0°C / $293.2\mu\text{A}$ at 20°C / $313.2\mu\text{A}$ at 40°C . This current is converted into a voltage (TSENSE) which is read by the microcontroller, and for greater accuracy, may be trimmed by adjusting the 500R potentiometer. See the Charge Controller manual for further details.

Specification:

Accuracy: Nominal 3%

Housing: Tinned copper lug with M10 fixing hole

Temp range: -30°C to $+60^\circ\text{C}$

Cable: Twisted pair of 0.52^2mm stranded

conductors with polyethylene insulation.

Screen: Aluminised tape with drain wire.

Outer sheath: PVC

Nominal outside diameter: 5.2mm

MSRx Temperature Sensor Part Numbers:

101 369 : 1m cable

101 302 : 10m cable (standard length)

101 301 : 5m cable

101 303 : 15m cable