

SINGLE CHANNEL THERMOCOUPLE AMPLIFIER

TC1



TC1 Thermocouple Amplifier is designed to meet the latest automotive standards and by its ruggedized structure provide a reliable and accurate solution even under harsh motorsport conditions.

TC1 offers a cost-effective solution for measuring temperatures in range of 0 up to +1250°C using K-type Thermocouple probe. The amplifier utilizes internal junction compensation circuitry to improve the measurement accuracy under various ambient conditions. The output is linearized analogue

voltage in range of 0 – 5V. The packaging is small, durable and lightweight aluminium case.

Description

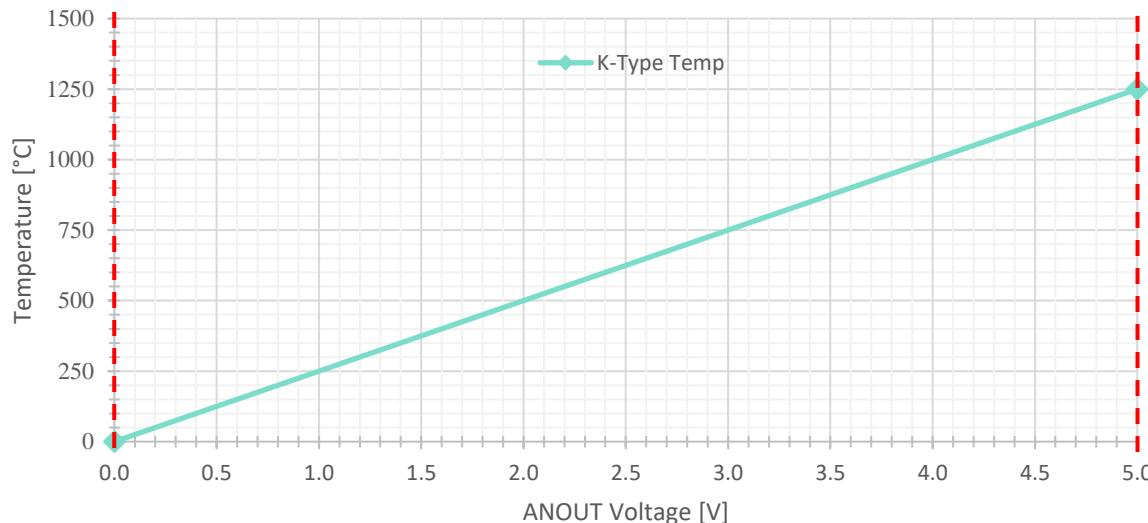
Electrical	
Operating Voltage Range	8 – 25V
Input current	~10mA
Temperature Range	
Measurement Junction	0 – 1250°C
Reference Junction	0 – 50 °C
Output	
Analogue Output	0 – 5V
Analogue Resolution	4mV/°C
Mechanical	
Operating Temperature	-20°C to +70°C
Dimensions	38 x 20 x 10 mm
Case material	Aluminium
Weight Controller	~20 g
Connector	Flying Leads 0,2m*

*other variants on request

Analogue Out Calibration

ANOUT Voltage [V] (linear)	0	5
K-Type Temperature [°C] ⁽¹⁾	0	1250

(1) Individual Calibration Sheets supplied with the Sensor



Pinout

TC1 Output – Flying lead		
Connector	Flying leads	
Mating	Flying leads	
Pin	Signal (TC1)	AWG
Rd	+VBATT (+12V)	22
Bl	GND**	22
Bk	GND-Sens**	22
Wt	Analogue OUT	22

**Grounds must be from common source

Drawing

