SENSYLINK Microelectronics

(CT1722)

Temperature Switch

CT1722 is Temperature Switch with Factory Program to setup Trigger Temperature and Hysteresis Temperature.
It is ideally used in Thermal Protection and Temperature Alarm Application etc.

Temperature Switch with Pre-programmed Hysteresis and Trigger Temperature

1. Description

CT1722 is temperature switches with pre-programmed in factory for trigger temperature and hysteresis temperature. It needs only one pull-up resistor in most applications. For CT1722, logic output is active low with open drain structure.

The chip integrates local temperature sensor, and compares it with pre-setup threshold trigger temperature continuously after measurement each time. Once the measured temperature meets or exceeds trigger temperature, ALERT pin will get active until the temperature drops below trigger temperature minus hysteresis temperature.

Available Package: SOT-23-5 package

2. Features

- Operation Voltage: 1.75V to 5.5V
- Average Quiescent Current: 12uA (Typ.)
- Temperature Accuracy: ±0.5°C (Typ.), ±1.5°C (Max.)
- Trigger Temperature: 75°C, 105°C, 115°C, 125 °C (1)
- Hysteresis Temperature: 10°C (1)
- Active Low Output with open drain
- Temperature Range: -40°C to 125°C

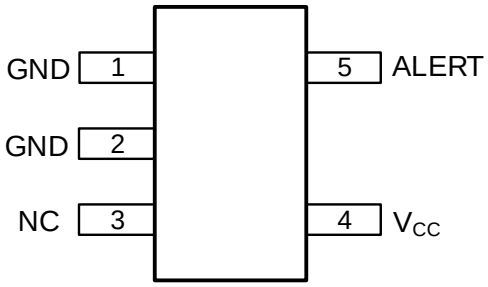
Note:

(1) For other temperature, please contact Sensylink sales.

3. Applications

- Thermal Protection
- Temperature Alarm

4. Pin Configurations (Top View)



SOT-23-5 (Package Code K5)

5. Typical Application

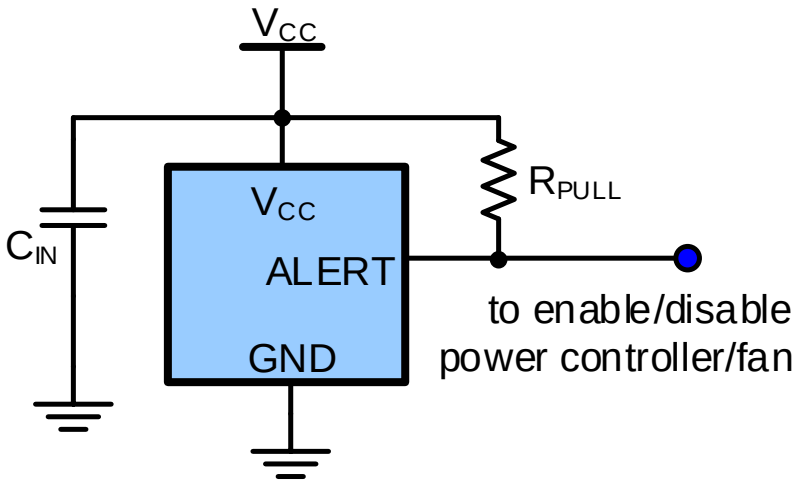


Figure 1. Typical Application of CT1722

6. Pin Description

Pin No. SOT-23-5	Pin Name	Description
1, 2	GND	Ground pin
3	NC	No connection.
4	V_{CC}	Power supply input pin
5	ALERT	Logic Output pin, it is active low with open drain structure. It needs an external pull-up resistor (4.7k to 100k) to V_{CC}.

7. Function Block

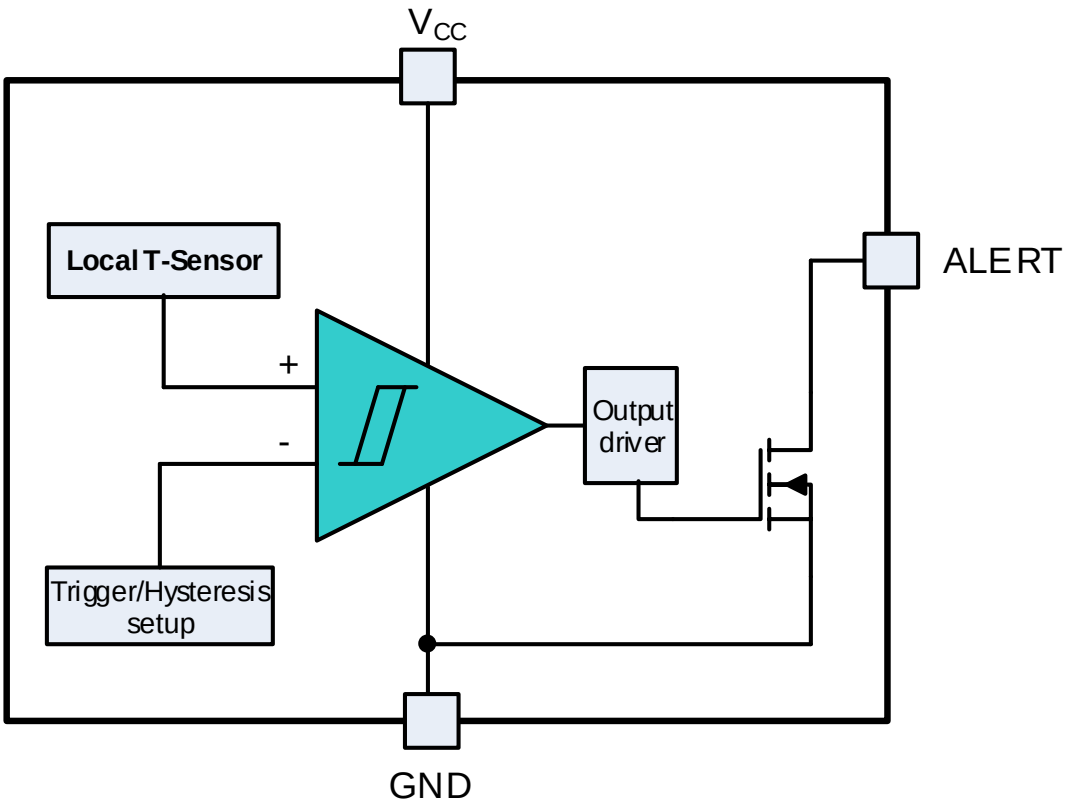
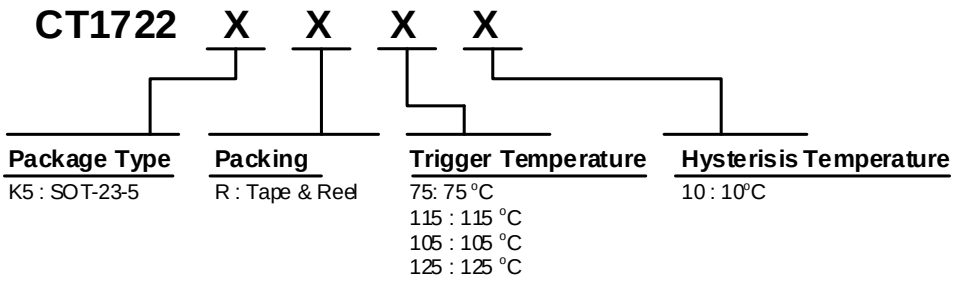


Figure 2. CT1722 Function Block

8. Ordering Information



Order PN[1]	Accuracy	Green[2]	Package	Marking ID[3]	Packing	MPQ	Operation Temperature
CT1722K5R7510	±1.5°C	Halogen free	SOT-23-5	HHWX	Tape & Reel	3,000	-40°C~+125°C
CT1722K5R11510	±1.5°C	Halogen free	SOT-23-5	BAWX	Tape & Reel	3,000	-40°C~+125°C
CT1722K5R10510	±1.5°C	Halogen free	SOT-23-5	DDWX	Tape & Reel	3,000	-40°C~+125°C
CT1722K5R12510	±1.5°C	Halogen free	SOT-23-5	DCWX	Tape & Reel	3,000	-40°C~+125°C

Note

(1) For other trigger / hysteresis temperature version, please contact sensylink sales.

(2) Based on ROHS Y2012 spec, Halogen free covers lead free. So most package types Sensylink offers only states halogen free, instead of lead free.

(3) Marking ID includes 2 rows of characters. In general, the 1st row of characters is part number, and the 2nd row of characters is date code plus production information and trace code. For very small outline package, there's 4 digits to stands for product information and date code.

SENSYLINK Microelectronics Inc.

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