

# 14 IR SENSOR TCRT5000



The TCRT5000 are reflective sensors which include an infrared emitter and phototransistor in a leaded package which blocks visible light. The package includes two mounting clips.

TCRT5000 sensor works with the general infrared sensor, like a sense of a TCRT5000 has an infrared emission tube and an infrared receiver tube. When the infrared emission tube by the receiver to receive the reflected tube, the receiver tube resistance will change , The circuit is generally reflected in the form of voltage changes, and after the ADC conversion or LM324 circuit shaping and other processed output results. Resistance from the receiver to receive changes in the infrared signal strength, often reflected in the reflective surface The color and the reflector surface of the receiving tube two or two aspects.

The TCRT5000 has a compact construction where the emitting-light source and the detector are arranged in the same direction to sense the presence of an object by using the reflective IR beam from the object. The operating wavelength is 950 nm.

The detector consists of a phototransistor.