

Infrared-Reflective-Sensor User's Manual

1. Product features

sensor	ST188
Voltage comparator chip	Wide voltage LM393
voltage	3.0V-5.3V
Fixed hole size	2.0mm

Principle:

The infrared emitting tube is composed of infrared light emitting diodes, and PN junction is made of high infrared radiation efficiency material (gallium arsenide). The forward bias voltage injects current into the PN junction to excite infrared light, and its spectral power distribution is at the center wavelength of 830-950nm. The power of infrared light is related to the current, but when the forward current exceeds the maximum rating, the infrared light emission power decreases. Infrared receiving tube is a semiconductor device that converts infrared light signal into electrical signal. Its core component is a PN junction of special material. Compared with ordinary diode, it has taken a big change in structure in order to receive more and larger area of light. With the increase of infrared light intensity, the current also increases.

2. Main application

Robot obstacle avoidance, obstacle avoidance car, assembly line counting and black and white line tracking.

3. Interface definition

PIN	Name	Description
1	VCC	3.0-5.3V
2	GND	GROUND
3	DOUT	Digital output
4	AOUT	Analog output

