Version: 1.0



SMTIR9902SIL INFRARED SENSOR WITH SILICON LENS

Typical Applications

Contactless measurement of surface temperatures Temperature measurement of moving objects Remote measurement due to small angle of view Climate control Medical instruments



Introduction

The Smartec infrared sensor type SMTIR9902SIL is a standard Smartec SMTIR9902 sensor equipped with a silicon lens for measuring radiation temperatures within a small angle of view (7.27°). The SMTIR9902SIL contains a NI1000 temperature sensor for measuring the temperature of the sensor itself. The temperature range of this internal sensor is – 20 to 100 °C. The sensor is mounted in a modified TO-05 encapsulation.

Specifications

For parameters not specified here, the specifications of the SMTIR9902 are applicable.

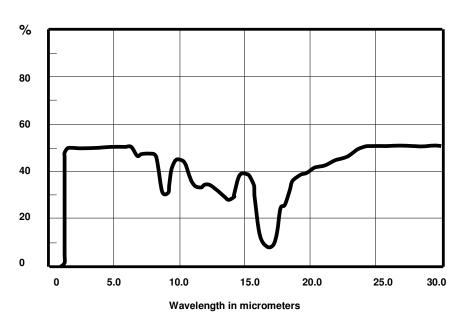
Parameters	typical	units
Number of thermojunctions	100	
Active area	0.50	mm²
Resistance of thermopile	50 ± 15	ΚΩ
Time Constant	50 ± 10	ms (63%)
Temperature range (sensor)	-20 - 100	℃
Storage temperature	-40 - 100	°C

Reference Thermistor

	1	•
Resistance	1.000 ± 0.004	KΩ (@ 0 °C)



FILTER(characteristic)



Dimensions

