

RB-See-190

Photo Interrupter OS25B10

Introduction

The OS25B10 is a high performance standard type photo interrupter, which combines high output GaAlAs infrared light emitting diode and high sensitive phototransistor.



Features

- 10mm space for interruption
- Easy to mount on PCB
- High-speed response
- Widely applicable

Application Ideas

- Tape-end sensors
- Timing sensors
- Edge sensors
- copiers

Cautions

The warnings and wrong operations possible cause dangerous.

Schematic

It is the schematic, the circuit about Eagle resource like .pdf should linked here in order to avoid memory exhausted.

Specification

Maximum Ratings (Ta=25°C)

Item	Symbol	Rating	Unit	
Input	Power Dissipation	PD	80	mW
	Reverse Voltage	VR	5	V
	Forward Current	IF	50	mA
	Pulse Forward current * 1	IFP	1	A
Output	Collector Power Dissipation	Pc	100	mW
	Collector Current	Ic	20	mA
	C-E Voltage	VCEO	30	V
	E-C Voltage	VECO	5	V
Operating Temperature	Topr	-25~+65	°C	

Storage Temperature	Tstg	-25~+85	°C
Soldering Temperature *2	Tsol	240	°C

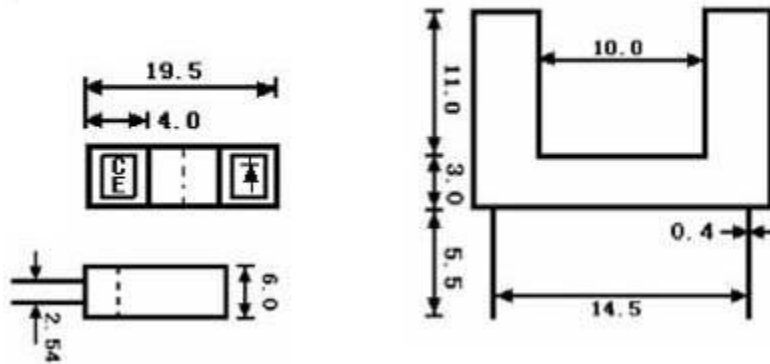
Electro-optical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward Voltage	VF		1.2	1.6	V
	Reverse Current	IR			10	μA
	Capacitance	Ct	f=1MHZ	25		pF
	Peak Wavelength	λP		940		nm
Output	Collector Dark Current	ICEO	VCE=10V	1	100	nA
	Light Current	IL	VCE=5V,IF=20mA	1	2.5	mA
	C-E Saturation Voltage	VCE(sat)	IF=20mA,Ic=0.5mA		0.2	0.4
Switching Speeds	Rise Time	tr	Vcc=10V, Ic=5mA, RL=100Ω	5		μsec
	Fall Time	tf		5		μsec

Pin definition and Rating

Mechanic Dimensions

Dimensions (Unit: mm)



Usage

Hardware Installation

Programming

Includes important code snippet. Demo code like :

Demo code

```
{
```

```
}
```