

SIT304

Photo Interrupter

The SIT304 is a high performance transmissive type photointerrupter, combines high-output GaAs IRED with high sensitive phototransistor.

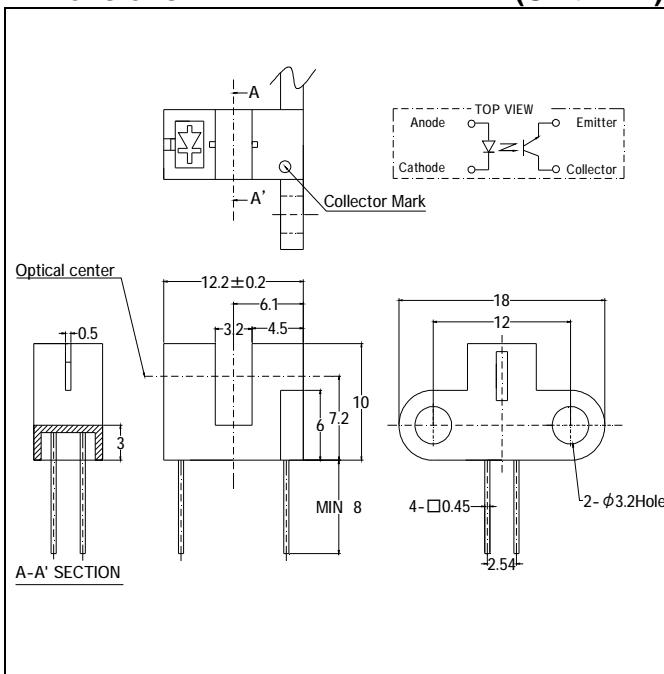
Features

- PCB direct mount type
- GAP:3.2mm
- Double-sided screw-mount

Applications

- Printers
- FAX
- Ticket vending machines
- Auto stampers

Dimensions (Unit: mm)



Maximum Ratings

(Ta=25°C)

	Item	Symbol	Rating	Unit
Input	Reverse Voltage	V _R	5	V
	Forward current	I _F	60	mA
	Pulse Forward Current ¹	I _{FP}	1	A
	Power Dissipation	P _D	100	mW
Output	Collector-Emitter Voltage	V _{CEO}	30	V
	Emitter-Collector Voltage	V _{ECD}	5	V
	Collector Current	I _C	40	mA
	Collector power dissipation	P _C	100	mW
Operating Temperature Range ²		Topr.	-20 ~ +85	°C
Storage Temperature Range ²		Tstg.	-30 ~ +85	°C
Soldering temp. ³		Tsol.	260	°C

* 1. Pulse width (tw) ≤ 100μs, Period (T) = 10msec.

* 2. No icebond or dew. *3. The soldering should be 1mm away from bottom of the holder. t=within 5s

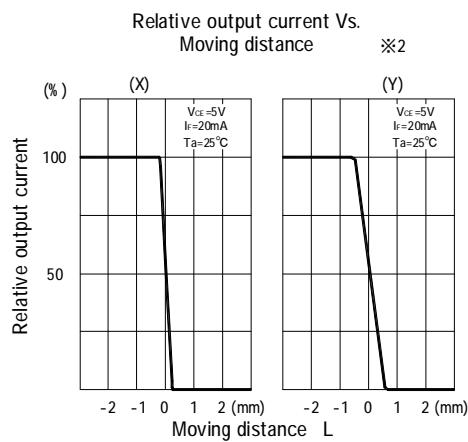
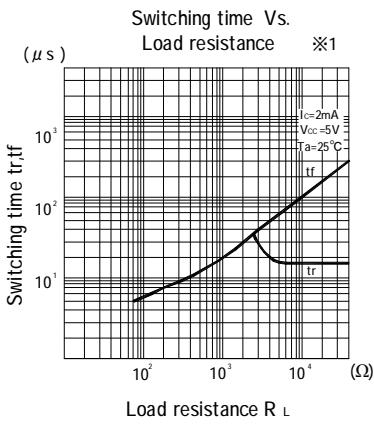
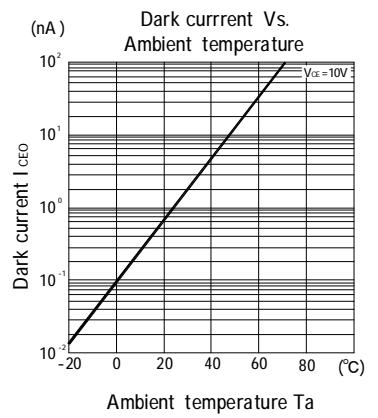
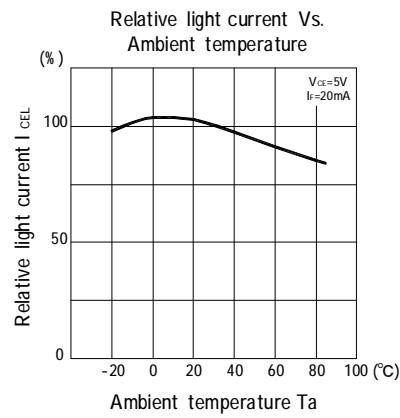
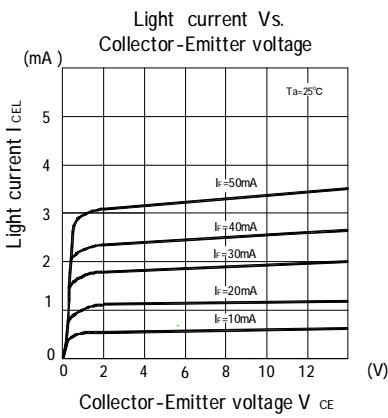
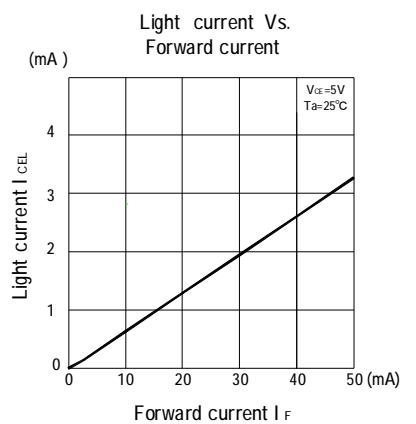
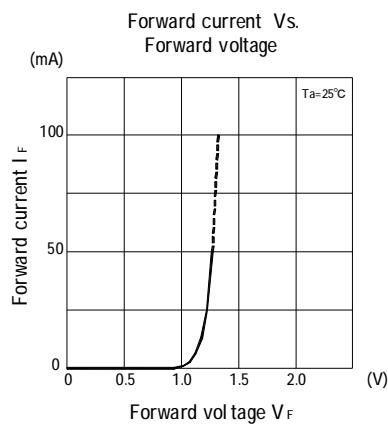
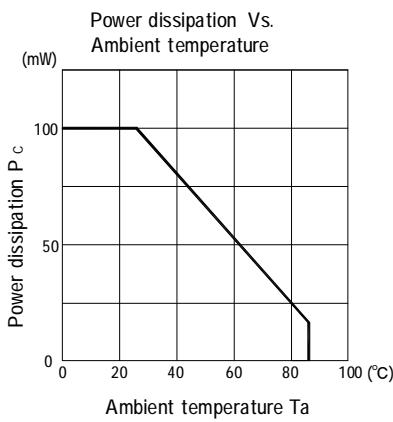
Electro-Optical Characteristics

(Ta=25°C)

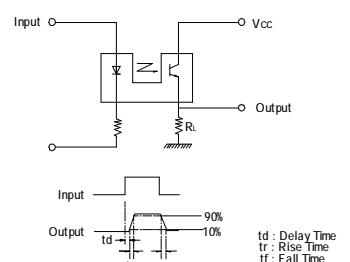
	Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Input	Forward voltage	V _F	I _F =20mA	-	1.2	1.4	V
	Peak Wavelength	λ _p	I _F =20mA	-	940	-	nm
	Reverse current	I _R	V _R =5V	-	-	10	μA
Output	Dark current	I _{CEO}	V _{CE} =10V E _V =0 lx	-	1	100	nA
Transfer characteristics	Collector Current	I _C	V _{CE} =5.0V, I _F =20mA Non-shading	0.5	-	10	mA
	Leakage Current	I _{CEOD}	V _{CE} =5.0V, I _F =20mA shading	-	0.5	10	μA
	C-E sat.voltage	V _{CE(sat)}	I _C =0.2mA, I _F =20mA	-	0.15	0.4	V
	Rise Time	t _r	V _{CC} =5.0V, I _C =2mA	-	4	-	μsec
	Fall Time	t _f	R _L =100Ω	-	5	-	μsec

Photo Interrupter(Transmissive)

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*1 Switching time measurement circuit



*2 Method of measuring position detection characteristic

