

SIT504S

Photo Interrupter

The SIT504S is a high performance transmissive type photointerrupter, combines high-output GaAs IRED with high sensitive phototransistor.

Features

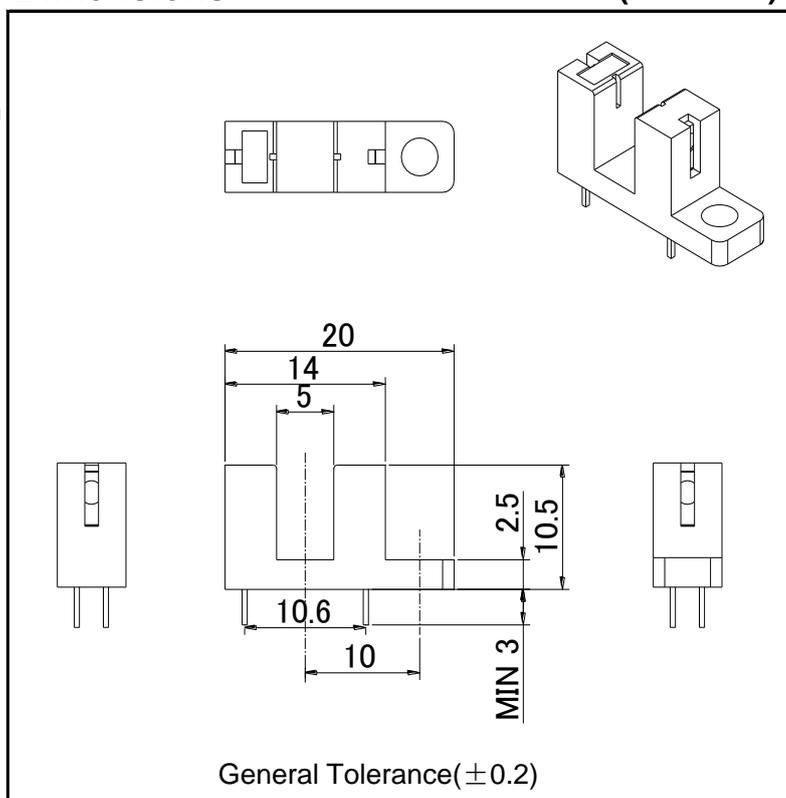
- PCB direct mount type
- Single-sided screw-mount
- 5.0mm gap
- Easy to mount

Applications

- Printers
- Scanners
- plotters
- Auto stampers

Dimensions

(Unit: mm)



Maximum Ratings

(Ta=25°C)

	Item	Symbol	Rating	Unit
Input	Reverse Voltage	VR	5	V
	Forward current	I _F	60	mA
	Pulse Forward Current ^{*1}	IFP	1	A
	Power Dissipation	PD	100	mW
Output	Collector-Emitter Voltage	V _{CEO}	30	V
	Emitter-Collector Voltage	V _{ECO}	5	V
	DC Collector Current	I _C	40	mA
	Collector power dissipation	PC	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. For MAX.5 seconds at the position of 1mm from the package

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Electro-Optical Characteristics

(Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Input	Forward voltage	$I_F=20\text{mA}$	-	1.2	1.4	V
	Peak Wavelength	$I_F=20\text{mA}$	-	940	-	nm
	Reverse current	$V_R=5\text{V}$	-	-	10	μA
Output	Dark current	$V_{CE}=10\text{V}$ $E_V=0\text{lx}$	-	1	100	nA
Transfer characteristics	Collector Current	$V_{CE}=5.0\text{V}$, $I_F=20\text{mA}$ Non-shading	0.4	-	4.0	mA
	Leakage Current	$V_{CE}=5.0\text{V}$, $I_F=20\text{mA}$ shading	-	0.5	10	μA
	C-E sat.voltage	$I_C=0.2\text{mA}$, $I_F=20\text{mA}$	-	0.15	0.4	V
	Rise Time	$V_{CC}=5.0\text{V}$, $I_C=2\text{mA}$ $R_L=100\Omega$	-	4	-	μsec
	Fall Time		-	5	-	μsec

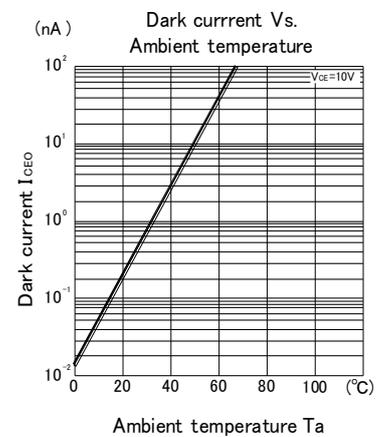
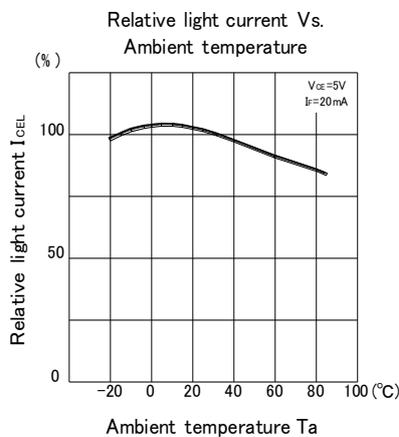
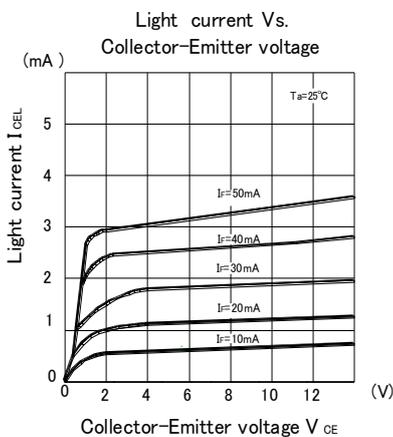
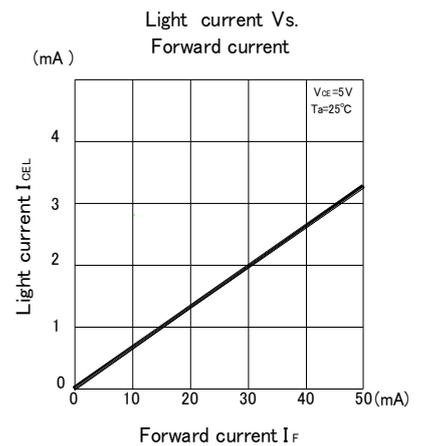
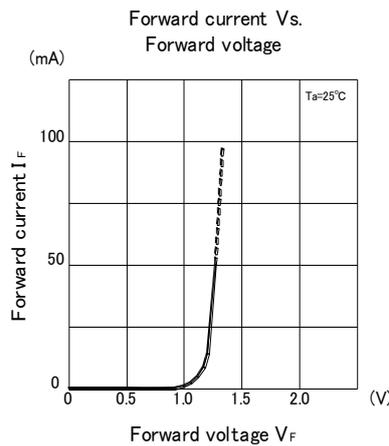
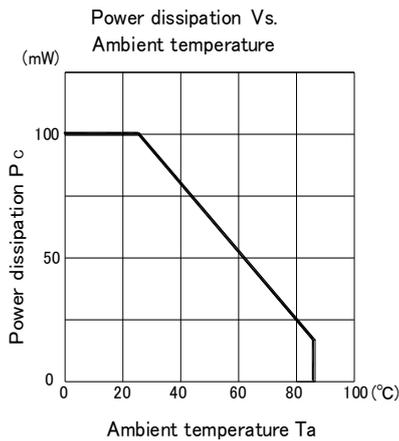
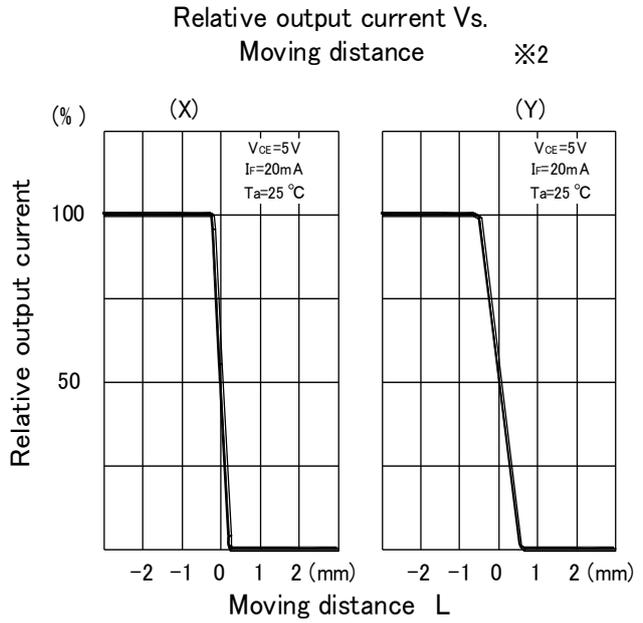
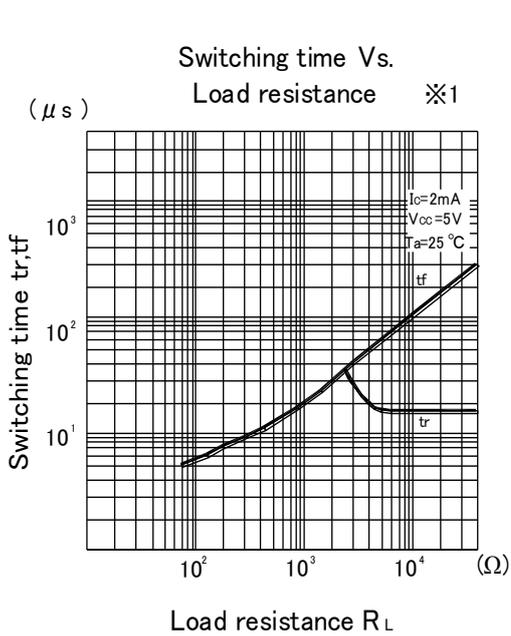
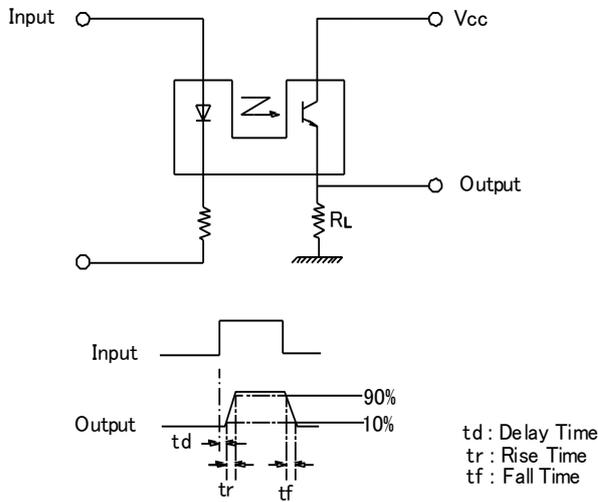


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*1 Switching time measurement circuit



*2 Method of measuring position detection characteristic

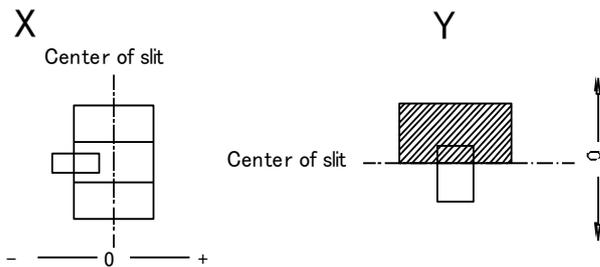


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Packing Specification

- 1.Fixed quantity (max 500pcs) of the products are packed into plastic bag
- 2.Eingt bags of the products are put into #2 box
- 3.Two #2 boxes are put into #3 box(max 8000pcs)
- 4.Packing slip is pasted on #3 box

