

# SIT208 Photo Interrupter

The SIT208 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

## Features

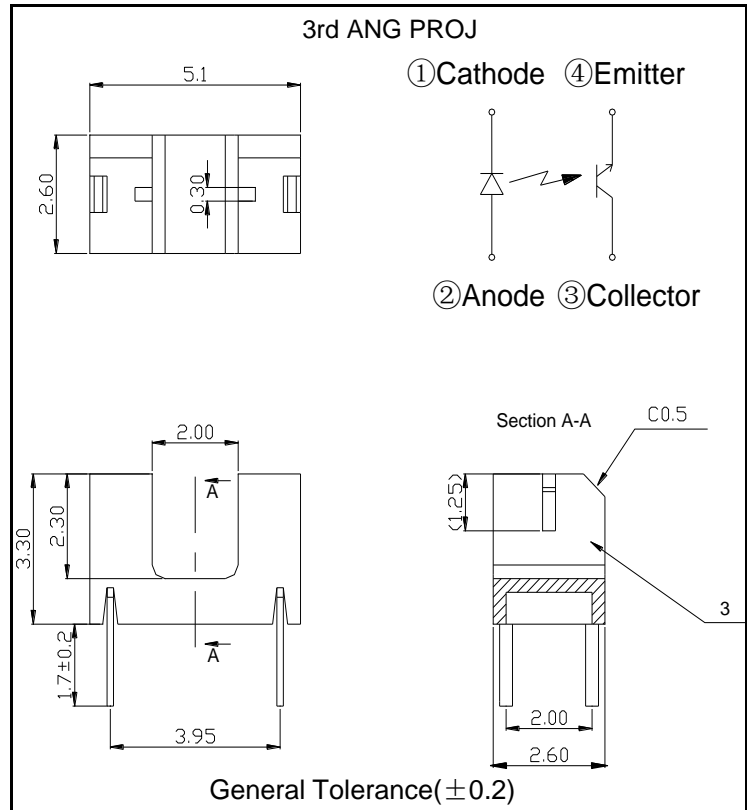
- PCB direct mount type
- GAP:2.0mm
- Ultra small size
- High resolution(slit 0.3mm)

## Application

- Camera
- Encoders
- Digital cameras
- Digital video cameras

## Dimensions

(Unit: mm)



## Maximum Ratings

(Ta=25°C)

Item		Symbol	Ratings	Unit
Input	Power dissipation	P <sub>D</sub>	75	mW
	Forward current	I <sub>F</sub>	50	mA
	Reverse voltage	V <sub>R</sub>	5	V
	Pulse forward current *1	I <sub>FP</sub>	0.5	A
Output	Collector power dissipation	P <sub>C</sub>	75	mW
	Collector current	I <sub>C</sub>	20	mA
	Collector-Emitter voltage	V <sub>CEO</sub>	30	V
	Emitter-Collector voltage	V <sub>ECO</sub>	5	V
Operating temperature *2		Topr.	-20~+85	°C
Storage temperature *2		Tstg.	-30~+100	°C
Soldering temperature *3		Tsol.	260	°C

\* 1 pulse width:tw≤100μs 周期: T=10ms

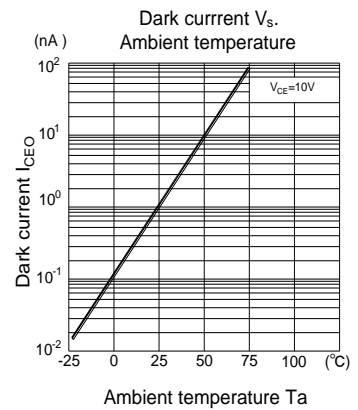
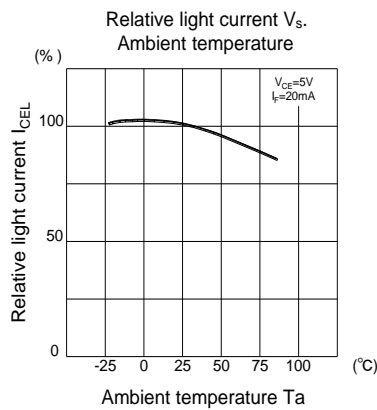
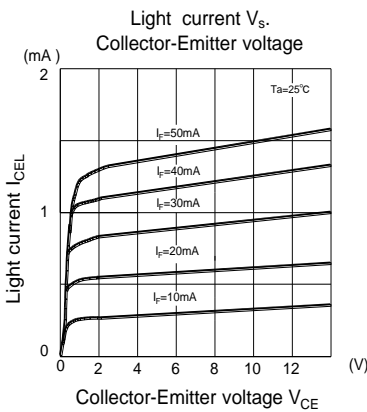
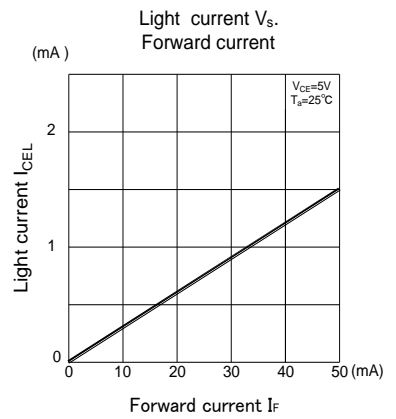
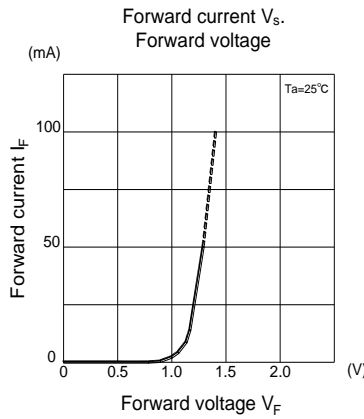
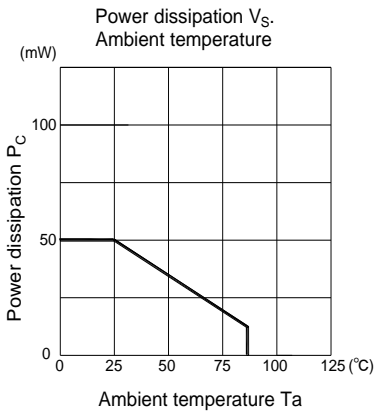
\* 2 No icebound or dew

\* 3 For MAX.5 seconds at the position of 1mm from the resin edge

Electro-Optical Characteristics

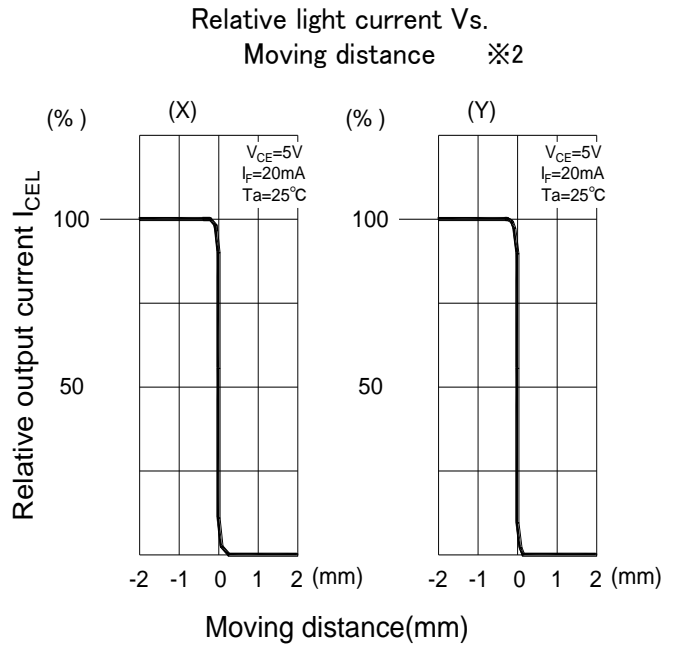
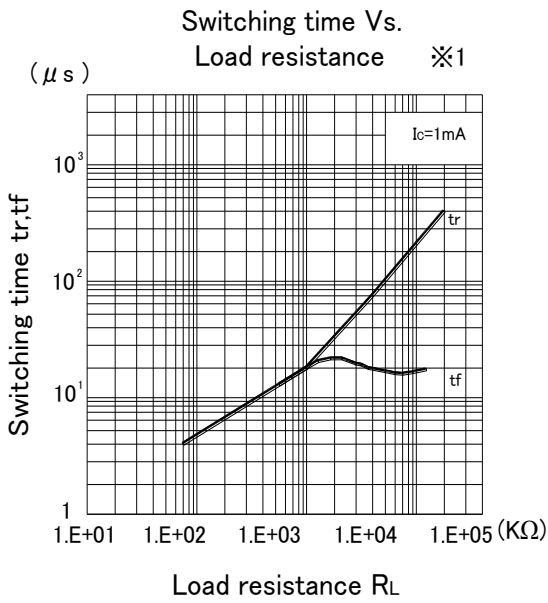
(Ta=25°C)

Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	$V_F$	$I_F=20\text{mA}$	-	1.2	1.4	V
	Reverse current	$I_R$	$V_R=5\text{V}$	-	-	10	$\mu\text{A}$
	Peak wavelength	$\lambda_P$	$I_F=20\text{mA}$	-	940	-	nm
Output	Dark current	$I_{CEO}$	$V_{CE}=10\text{V}, E_V=0\text{lX}$	-	1	100	nA
Transfer characteristics	Light current	$I_{CEL}$	$I_F=20\text{mA}, V_{CE}=5\text{V}, \text{Non-shading}$	0.25	-	1.8	mA
	Leak current	$I_{CEOD}$	$I_F=20\text{mA}, V_{CE}=5\text{V}, \text{Shading}$	-	0.5	10	$\mu\text{A}$
	C-E saturation voltage	$V_{CE(sat)}$	$I_F=10\text{mA}, I_C=0.03\text{mA}$	-	0.15	0.4	V
	Rise time	tr	$I_C=1\text{mA}, V_{CC}=5\text{V}, R_L=100\Omega$	-	10	-	$\mu\text{s}$
	Fall time	tf		-	10	-	$\mu\text{s}$

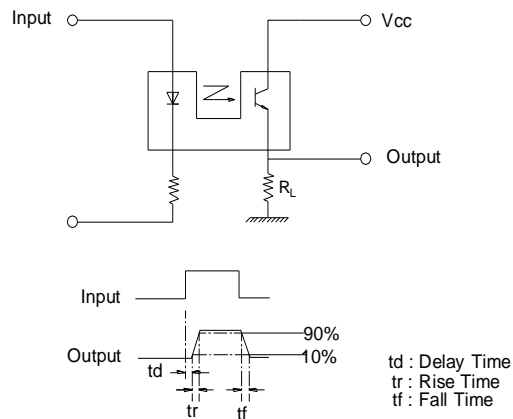


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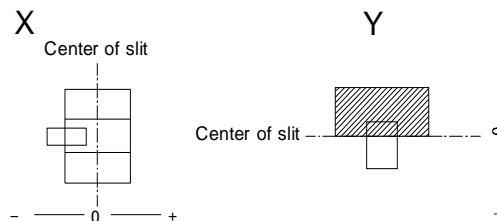
## SIT208



\*1 Switching time measurement circuit



\*2 Method of measuring position detection characteristic



### Packing Specification

- 1.Fixed quantity (max 200pcs) of the products are packed into plastic bag
- 2.Ten bags of the products are put into #1 box
- 3.Ten #1 boxes are put into #2 box(max 20000pcs)
- 4.Two #2 boxes are put into #3 box(max 40000pcs)
- 5.Packing slit is pasted on #3 box

