

SIT210

Photo Interrupter

Dimensions

Unit:mm

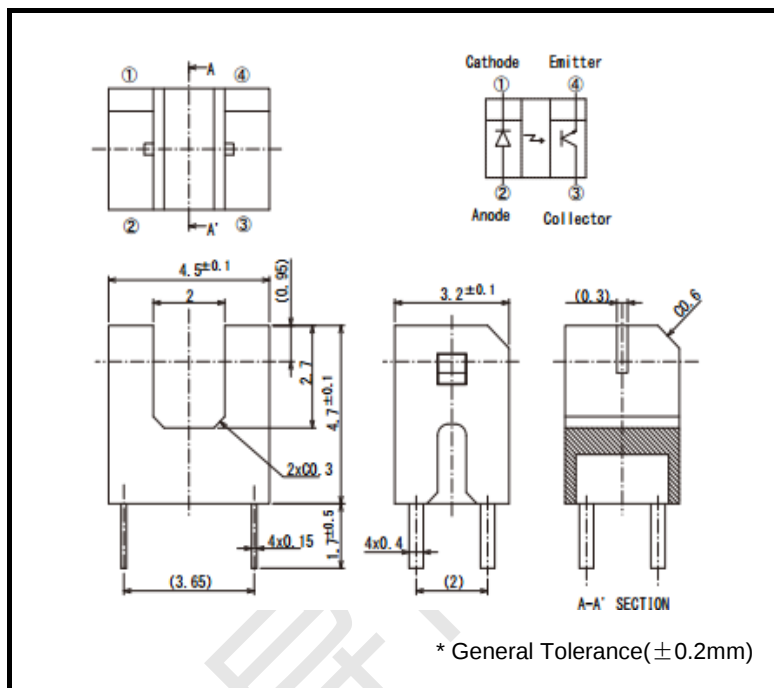
The SIT210 is a transmission type photointerrupter combined high power infrared LED with high sensitive phototransistor, suitable for highly accurate position detecting.

Features

- PCB direct mount type
- GAP:2mm
- High resolution(slit 0.3mm)
- Ultra small size
- RoHS Compliance

Applications

- Camera



Maximum Ratings

(Ta=25°C)

Item		Symbol	Ratings	Unit
Input	Power dissipation	P _D	75	mW
	Forward current	I _F	50	mA
	Reverse voltage	V _R	5	V
	Pulse Forward Current * ¹	I _{FP}	0.5	A
Output	Collector power dissipation	P _C	75	mW
	Collector current	I _C	20	mA
	Collector-Emitter voltage	V _{CEO}	30	V
	Emitter-Collector voltage	V _{ECO}	5	V
Operating temperature * ²		T _{opr.}	-20~+85	°C
Storage tempertature * ²		T _{stg.}	-30~+100	°C
Soldering tempertature * ³		T _{sol.}	260	°C

* 1.Pulse width: $t_w \leq 100\mu s$ Period: $T=10ms$

* 2.No icebound or dew

* 3.The soldering should be 1.2mm away from bottom of the holder. $t \leq$ within 3s

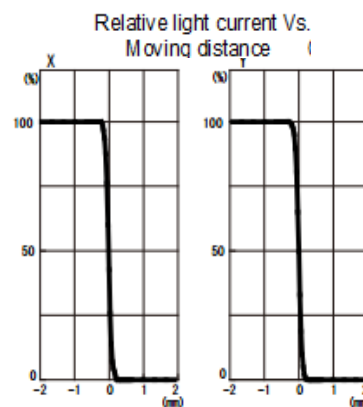
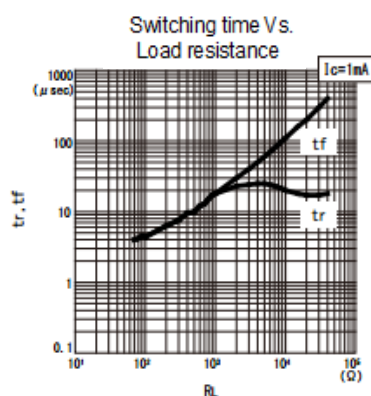
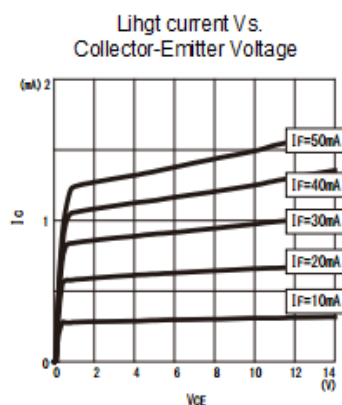
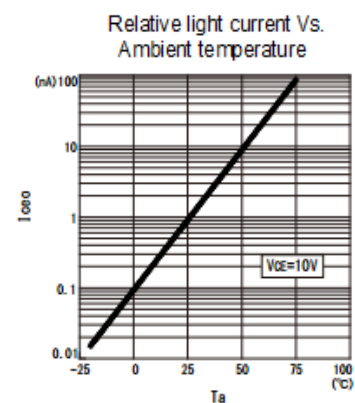
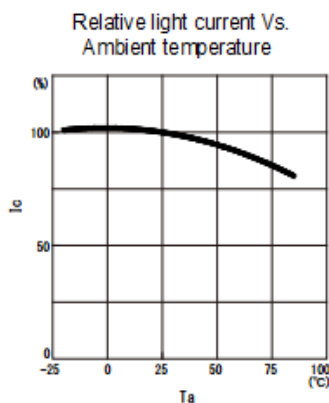
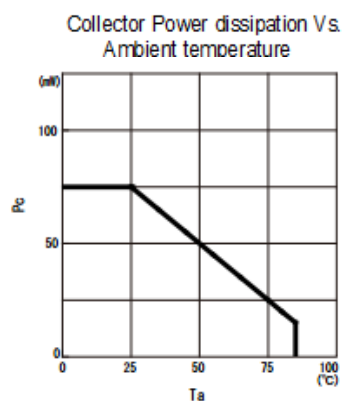
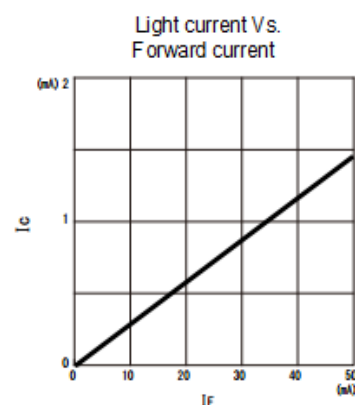
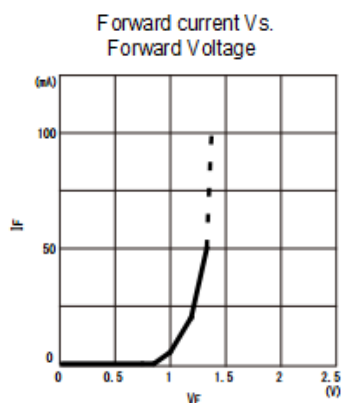
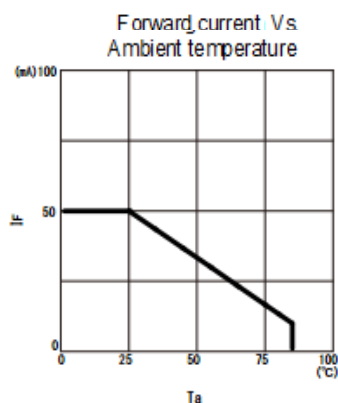
Electro-Optical Characteristics

(Ta=25°C)

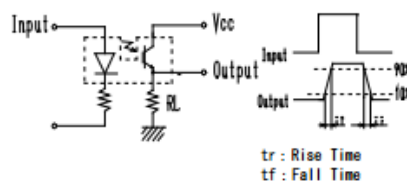
Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	V_F	$I_F=20mA$	-	1.2	1.4	V
	Reverse current	I_R	$V_R=5V$	-	-	10	μA
	Peak wavelength	λ_p	$I_F=20mA$	-	940	-	nm
Output	Dark current	I_{CEO}	$V_{CE}=10V, E_V=0lx$	-	1	100	nA
Transfer characteristics	Light current	I_C	$I_F=20mA, V_{CE}=5V, Non-shading$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

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product,

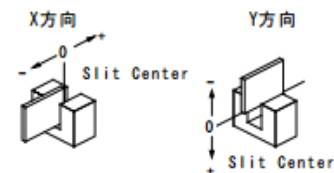
would you please refer to the latest specifications.



*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 slip is pasted on #3 box

