

SIT602

Photo Interrupter

The SIT602 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

Features

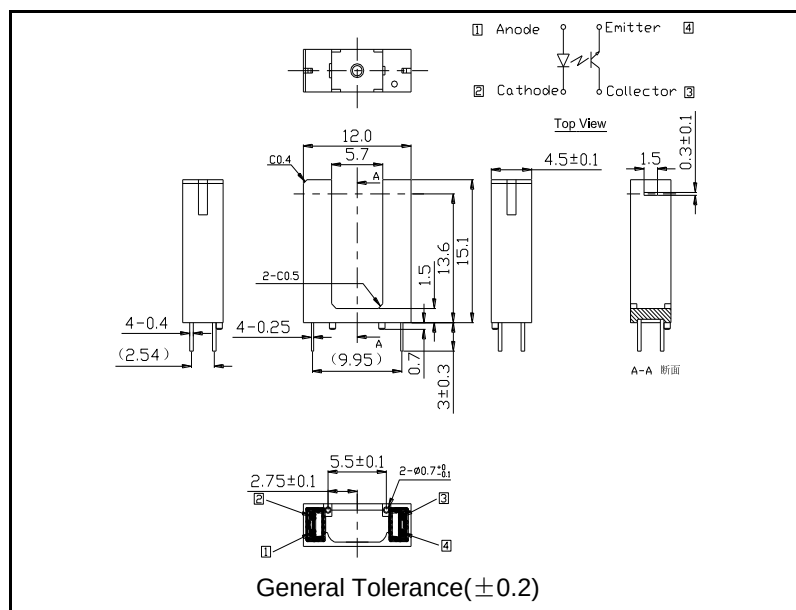
- PCB direct mount type
- GAP:5.7mm
- With the installation positioning boss
- Horizontal slit

Applications

- Printers
- Ticket vending machines
- Copiers

Dimensions

Unit:mm



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}	1	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		Topr.	-20~+85	°C
Storage temperature *2		Tstg.	-30~+100	°C
Soldering temperature *3		Tsol.	260	°C

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

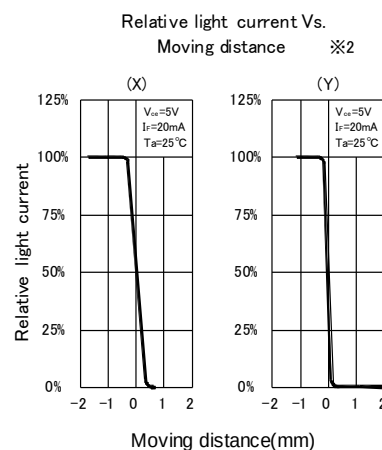
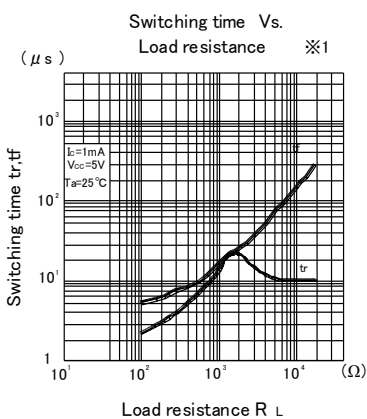
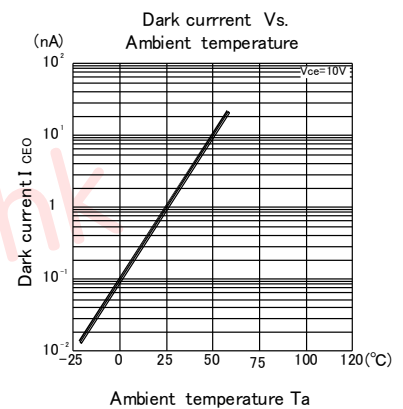
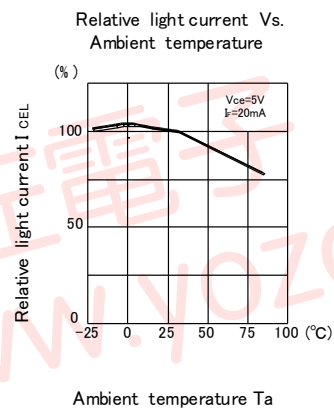
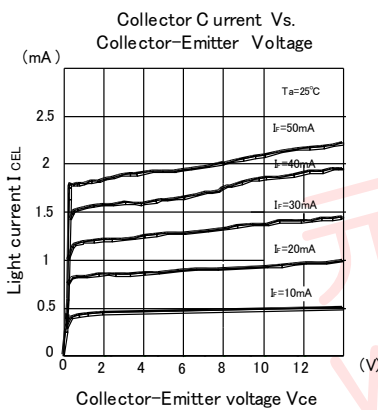
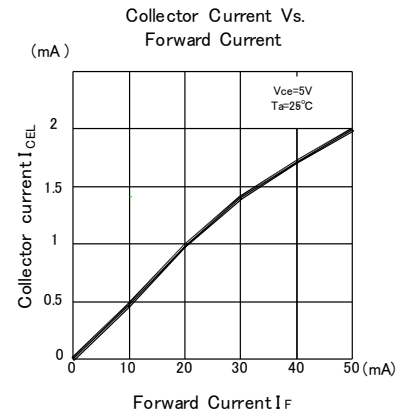
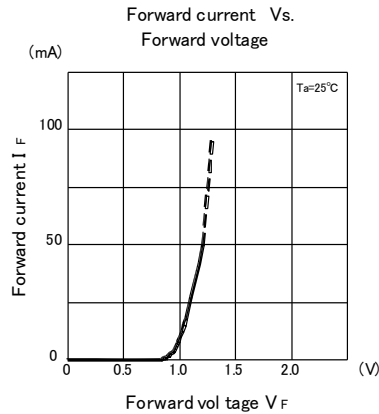
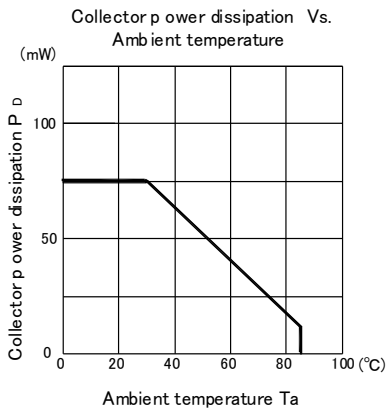
* 2.No icebound or dew

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

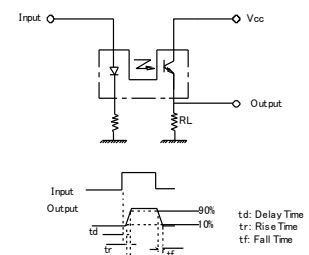
Electro-Optical Characteristics

(Ta=25°C)

Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	V_F	$I_F=20mA$	-	1.2	1.4	V
	Reverse current	I_R	$V_R=5V$	-	-	10	μA
	Peak wavelength	λ_p	$I_F=20mA$	-	940	-	nm
Output	Collector dark current	I_{CEO}	$V_{CE}=10V, E_v=0lx$	-	1	100	nA
	Peak sensitivity wavelength	λ_p	-	-	880	-	nm
Transmission	Light current	I_C	$V_{CE}=5V, I_F=20mA, \text{Non-shading}$	0.35	-	2.1	mA
	C-E saturation voltage	$V_{CE(sat)}$	$I_F=20mA, I_C=0.05mA$	0	0.15	0.4	V
	Rise time	t_r	$V_{CC}=5V, I_C=1mA, R_L=10K\Omega$	-	17	-	μs
	Fall time	t_f		-	130	-	μs



*1 Switching time measurement circuit



*2 Method of measuring position detection characteristic

