

SIT401

Photo Interrupter

The SIT401 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

Features

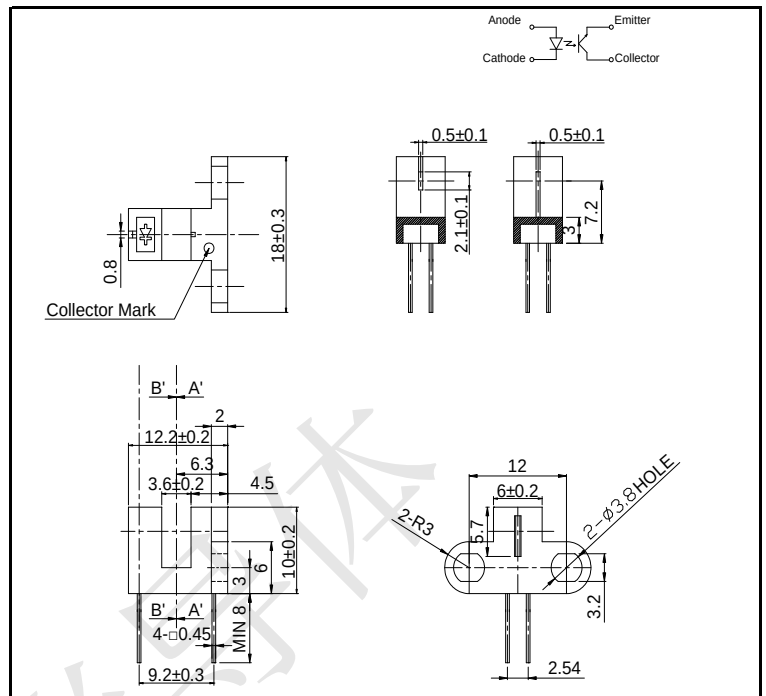
- PCB direct mount type
- GAP:3.6mm
- Double-sided screw-mount
- RoHS Compliance

Application

- Printers
- Plotters
- Ticket vending machines
- Auto stampers

DIMENSIONS

Unit:mm



MAXIMUM RATINGS

Item		Symbol	Ratings	Unit
Input	Power dissipation	P_D	100	mW
	Forward current	I_F	60	mA
	Reverse voltage	V_R	5	V
Output	Collector power dissipation	P_C	100	mW
	Collector current	I_C	40	mA
	Collector-Emitter voltage	V_{CEO}	30	V
	Emitter-Collector voltage	V_{ECO}	5	V
Operating temperature		$T_{opr.}$	-20~+85	°C
Storage temperature		$T_{stg.}$	-30~+85	°C
Soldering temperature ^{*1}		$T_{sol.}$	260	°C

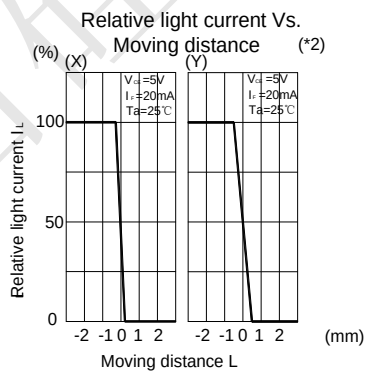
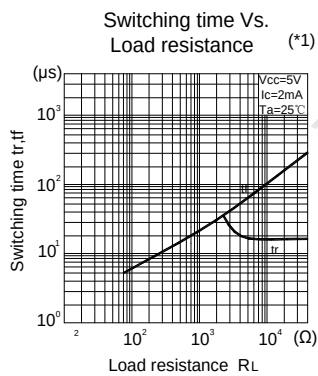
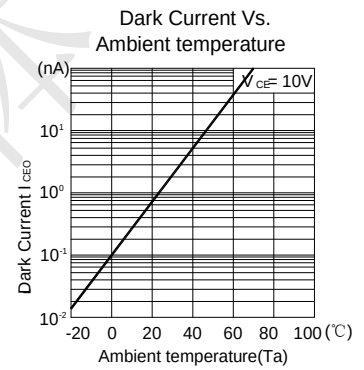
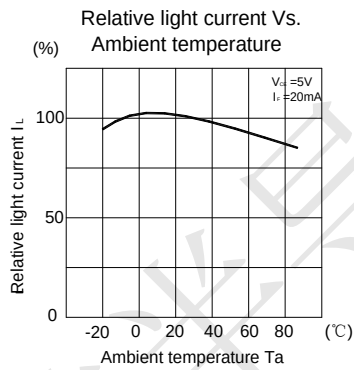
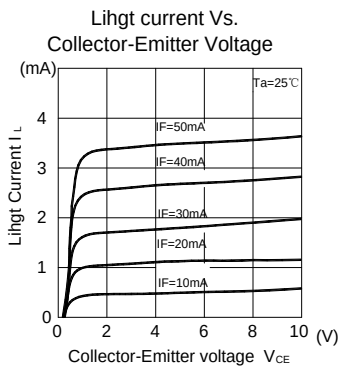
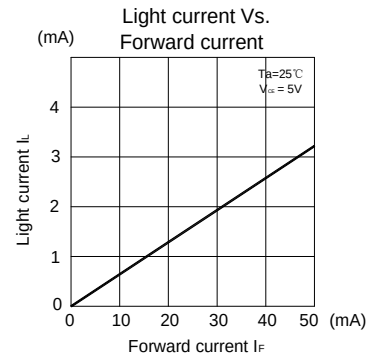
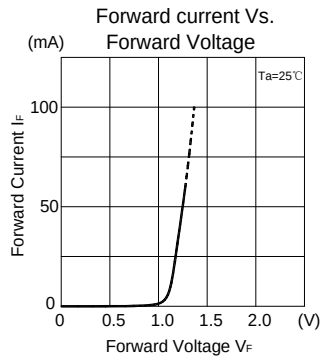
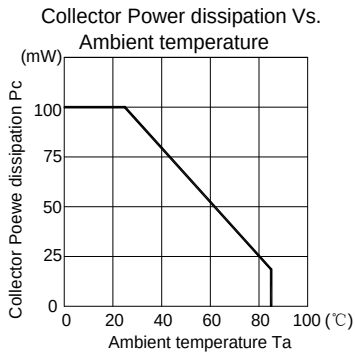
* 1 The soldering should be 1mm away from bottom of the holder. t=within 3s

Electro-Optical Characteristics

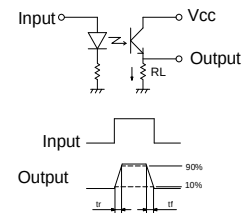
Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	V_F	$I_F=20mA$	-	1.2	1.4	V
	Reverse current	I_R	$V_R=5V$	-	-	10	μA
	Peak wavelength	λ_P	$I_F=20mA$	-	940	-	nm
Output	Dark current	I_{CEO}	$V_{CE}=10V, E_V=0lx$	-	-	100	nA
Transfer characteristics	Light current	I_C	$I_F=20mA, V_{CE}=5V, Non-shading$	0.5	-	10	mA
	Leak current	I_{CEOD}	$I_F=20mA, V_{CE}=5V, Shading$	-	0.5	10	μA
	C-E saturation voltage	$V_{CE (sat)}$	$I_F=20mA, I_C=0.1mA$	-	0.15	0.4	V
	Rise time	t_r	$I_C=2mA, V_{CC}=5V, R_L=100\Omega$	-	4	-	μs
	Fall time	t_f	$I_C=2mA, V_{CC}=5V, R_L=100\Omega$	-	5	-	μs

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*1 Switching time measurement circuit



*1 Switching time measurement circuit (X) (Y)

