

# SIT505S

## Photo Interrupter

The SIT505S is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

### Features

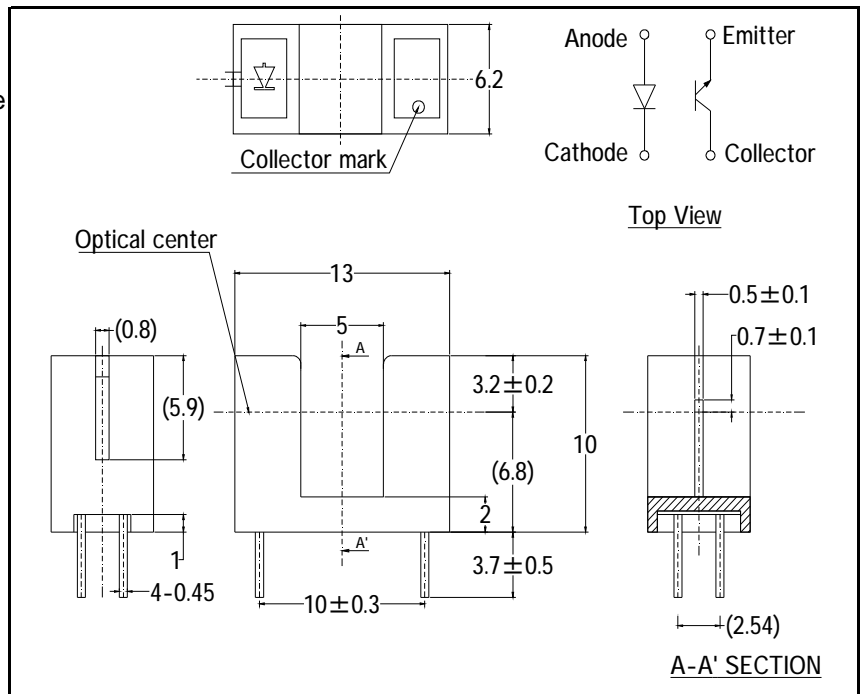
- PCB direct mount type
- GAP:5mm
- RoHS Compliance

### Applications

- Printers
- FAX
- Copiers
- Scanners
- Amusement machines

### DIMENSIONS

Unit:mm



### MAXIMUM RATINGS

(Ta=25°C)

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

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

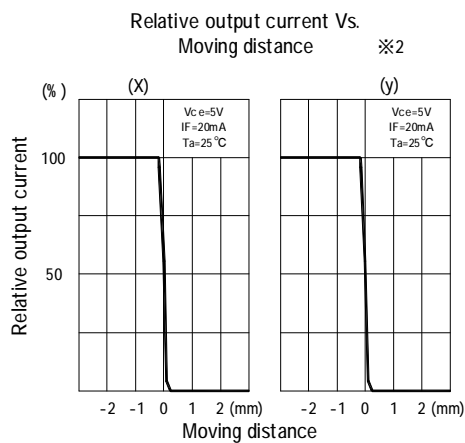
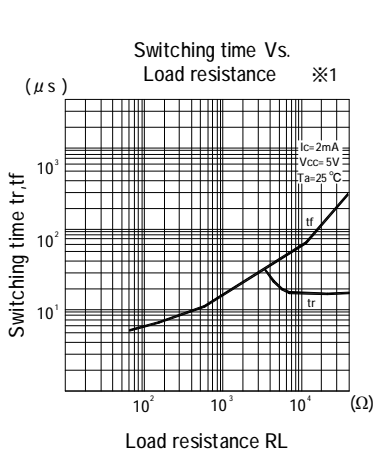
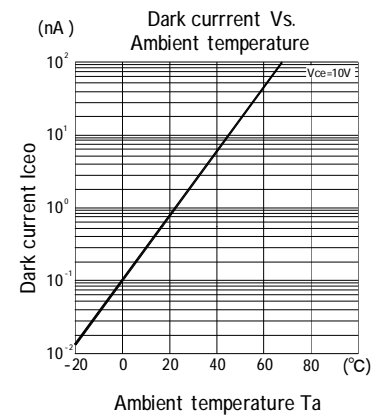
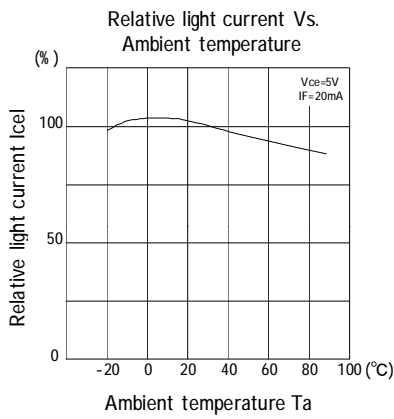
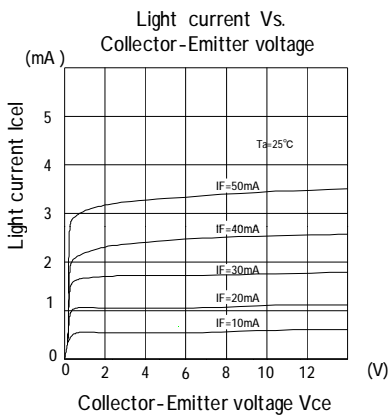
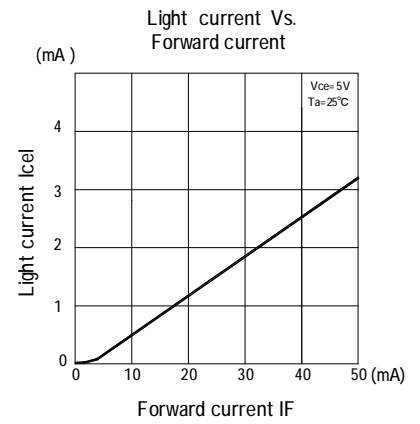
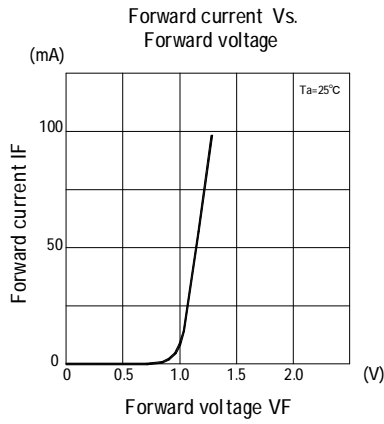
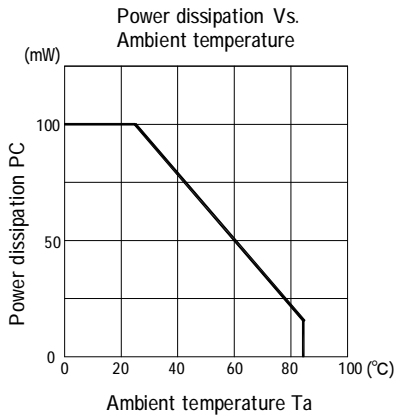
### Electro-Optical Characteristics

(Ta=25°C)

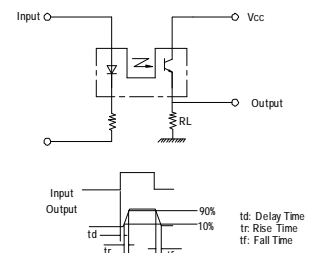
Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	$V_F$	$I_F=20mA$	-	1.2	1.4	V
	Reverse current	$I_R$	$V_R=5V$	-	-	10	μA
	Peak wavelength	$\lambda_p$	$I_F=20mA$	-	940	-	nm
Output	Dark current	$I_{CEO}$	$V_{CE}=10V, E_V=0lx$	-	1	100	nA
Transmission	Light current	$I_C$	$I_F=20mA, V_{CE}=5V, Non-shading$	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	$t_f$		-	5	-	μs

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\*1 Switching time measurement circuit



\*2 Method of measuring position detection characteristic

