

SIT305

Photo Interrupter

The SIT305 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

Features

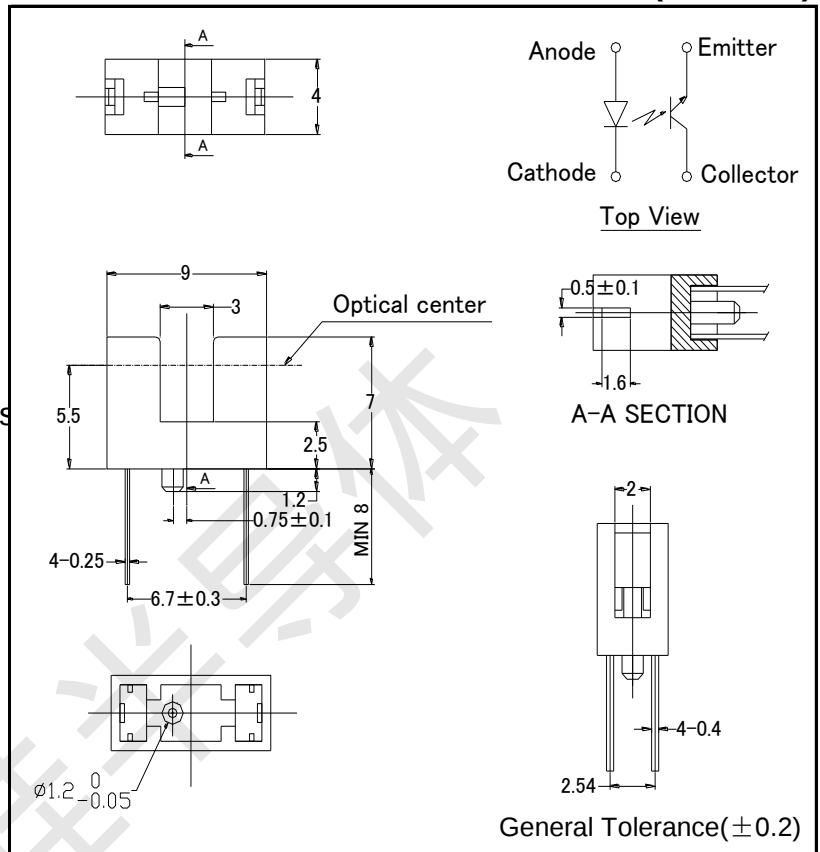
- PCB direct mount type
- GAP:3.0mm
- With the installation positioning boss
- Compact/High performance
- RoHS Compliance

Applications

- Printers
- FAX
- Copiers
- Car stereo
- Amusement machines

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

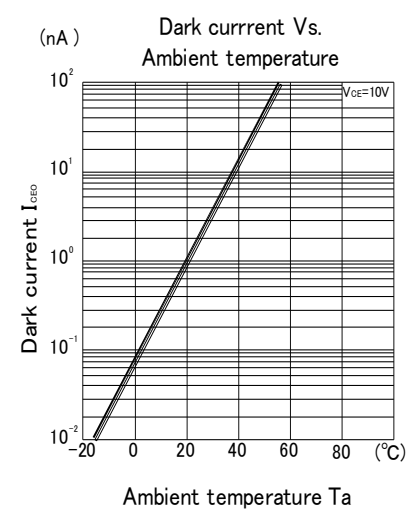
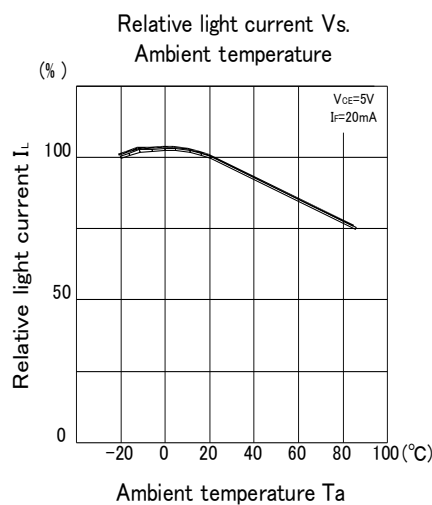
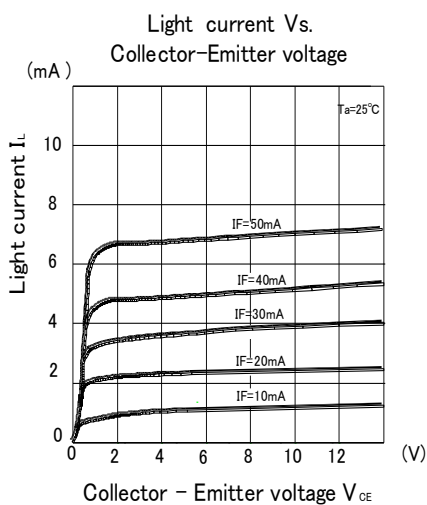
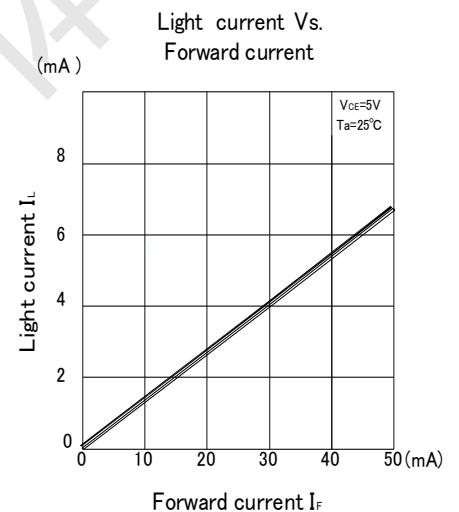
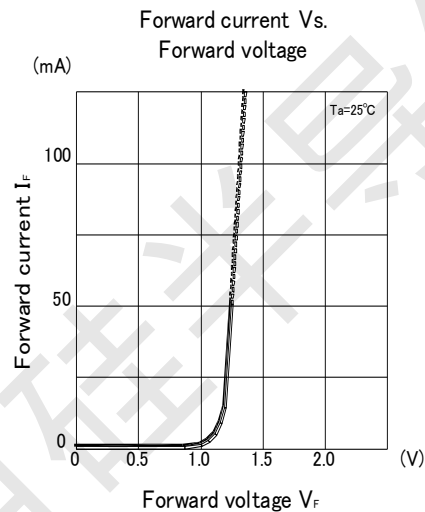
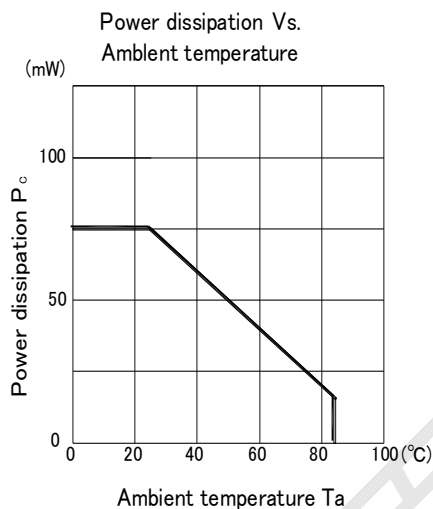
* 1 The soldering should be 1mm away from bottom of the holder. t=within 3s

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.

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	μA
	Peak wavelength	λ_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_C	$I_F=20\text{mA}, V_{CE}=5\text{V}, \text{Non-shading}$	0.7	-	14	mA
	Leak current	I_{CEOD}	$I_F=20\text{mA}, V_{CE}=5\text{V}, \text{Shading}$	-	0.5	10	μA
	C-E saturation voltage	$V_{CE(sat)}$	$I_F=20\text{mA}, I_C=0.1\text{mA}$	-	0.15	0.4	V
	Rise time	tr	$I_C=0.5\text{mA}, V_{CC}=10\text{V}, R_L=100\Omega$	-	10	-	μs
	Fall time	tf		-	15	-	μs

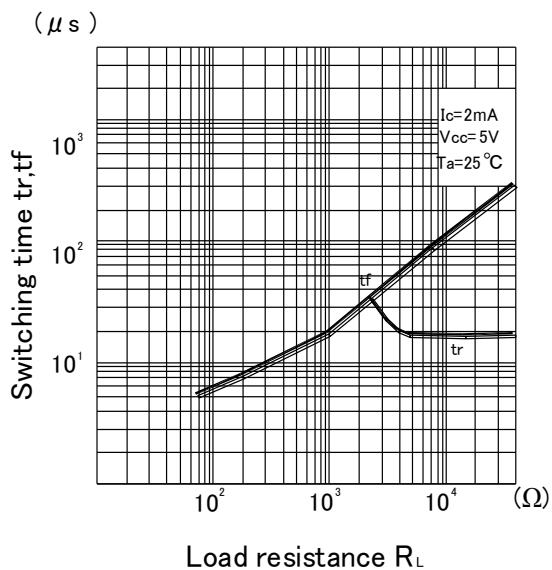


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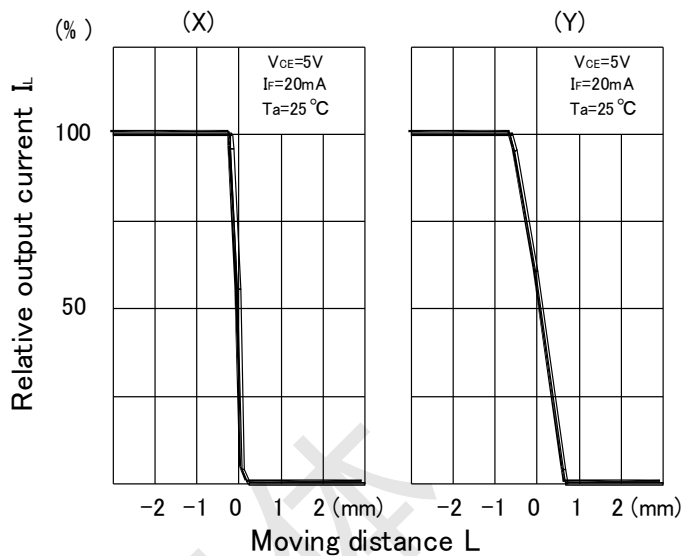
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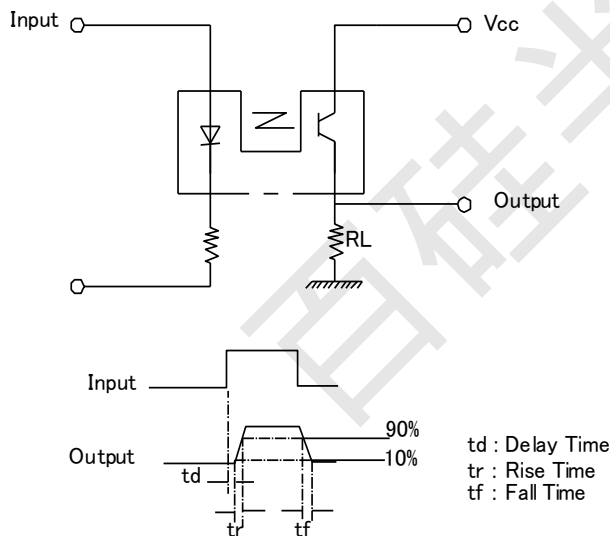
Switching time Vs.
Load resistance ※1



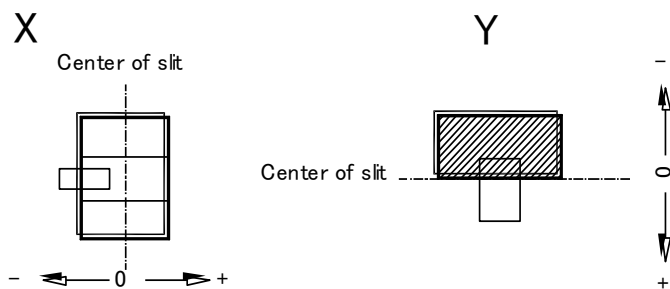
Relative output current Vs.
Moving distance ※2



※1 Switching time measurement circuit



※2 Method of measuring position detection characteristic



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Packing Specification

- 1.Fixed quantity (max 1000pcs) of the products are packed into plastic bag
- 2.Ten bags of the products are put into #2 box
- 3.Two #2 boxes are put into #3 box(max 20000pcs)
- 4.Packing slip is pasted on #3 box

