

# SIT204F-01 Photo Interrupter

## Dimensions

(Unit: mm)

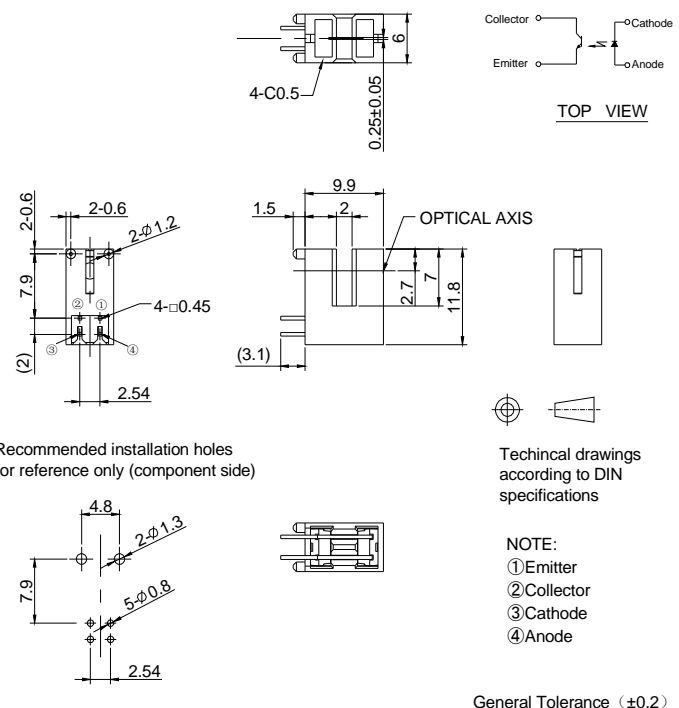
The SIT204F-01 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

### Features

- PCB direct mount type
- GAP:2.0mm
- High resolution ( slit 0.25mm )
- With the installation positioning boss
- RoHS Compliance

### Applications

- Printer
- Scanner
- CD changers
- Encoders



### Maximum Ratings

(Ta=25°C)

Item		Symbol	Rating	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 <sup>*1</sup>		Tstg.	-30 ~ +85	°C
Soldering temperature <sup>*2</sup>		Tsol.	260	°C

\*1. No icebound or dew.

\*2. The soldering should be 1mm away from bottom of the holder t=within 3s

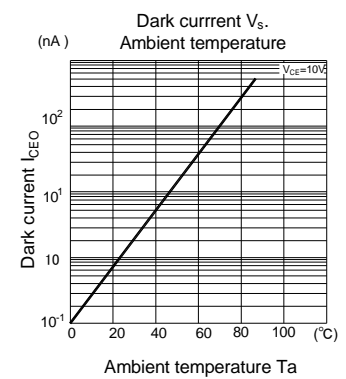
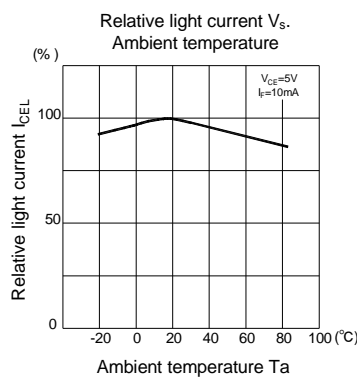
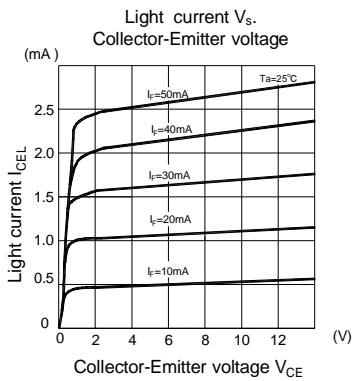
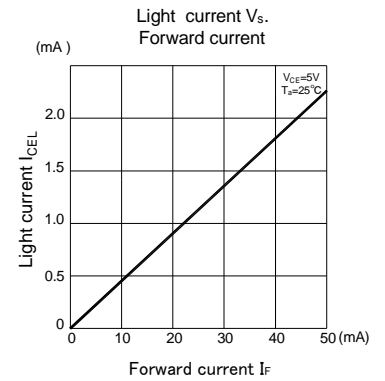
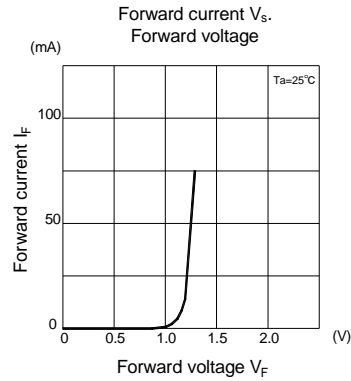
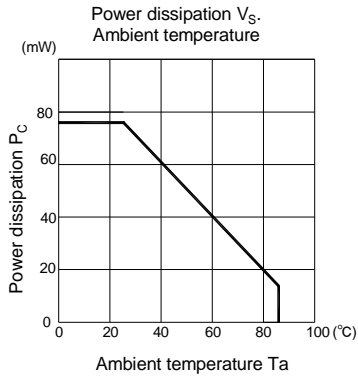
# Photo Interrupter

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### Electro-Optical Characteristics

(Ta=25°C)

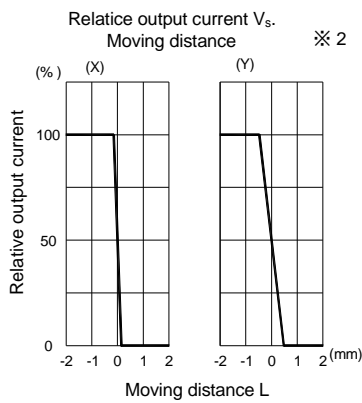
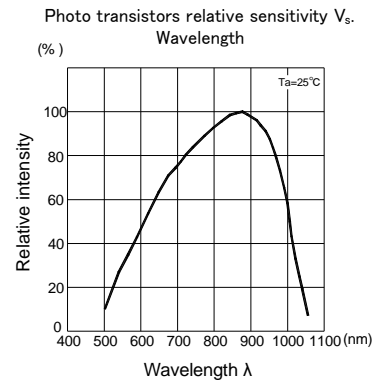
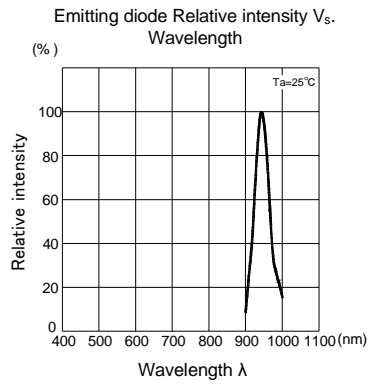
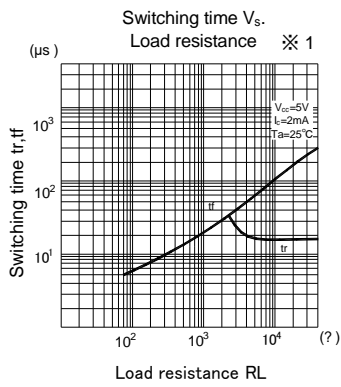
Item		Symbol	Conditions	Min.	Typ.	Max.	Unit
Input	Forward voltage	$V_F$	$I_F=20\text{mA}$	-	1.2	1.4	V
	Reverse current	$I_R$	$V_R=5\text{V}$	-	-	10	$\mu\text{A}$
	Peak wavelength	$\lambda_P$	$I_F=20\text{mA}$	-	940	-	nm
Output	Dark current	$I_{CEO}$	$V_{CE}=10\text{V}$ $E_V=0\text{lx}$	-	-	1	$\mu\text{A}$
	Peak SENS.Wavelength	$\lambda_P$	-	-	880	-	nm
Transfer characteristics	Light current	$I_{CEL}$	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$ 入光状态 (Non-Shading)	1.0	-	10	mA
	Leak current	$I_{CEOD}$	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$ 遮光状态 (Shading)	-	0.5	10	$\mu\text{A}$
	C-E sat.voltage	$V_{CE(sat)}$	$I_F=20\text{mA}$ $I_C=0.05\text{mA}$	-	0.15	0.4	V
	Rise time	$t_r$	$V_{CC}=2\text{V}$ , $I_C=0.5\text{mA}$ , $R_L=1\text{K}\Omega$	-	25	-	$\mu\text{s}$
	Fall time	$t_f$		-	30	-	$\mu\text{s}$



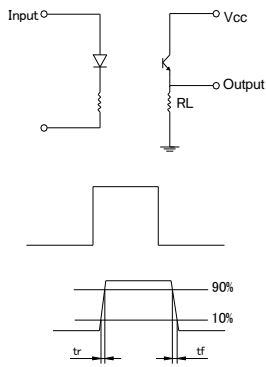
The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

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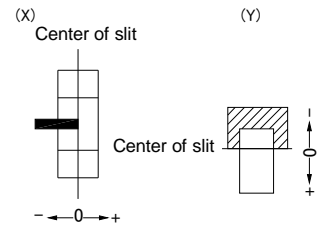
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※ 1 Switching time measurement circuit



※ 2 Method of measure position detection characteristic

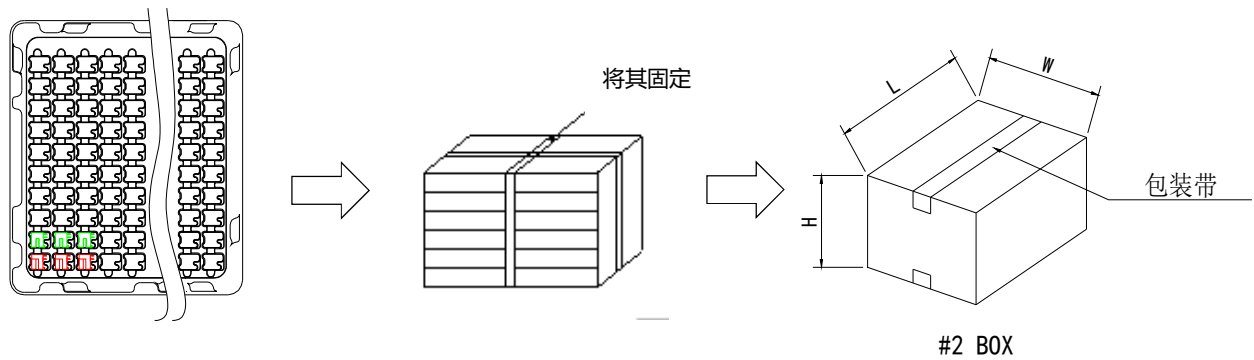


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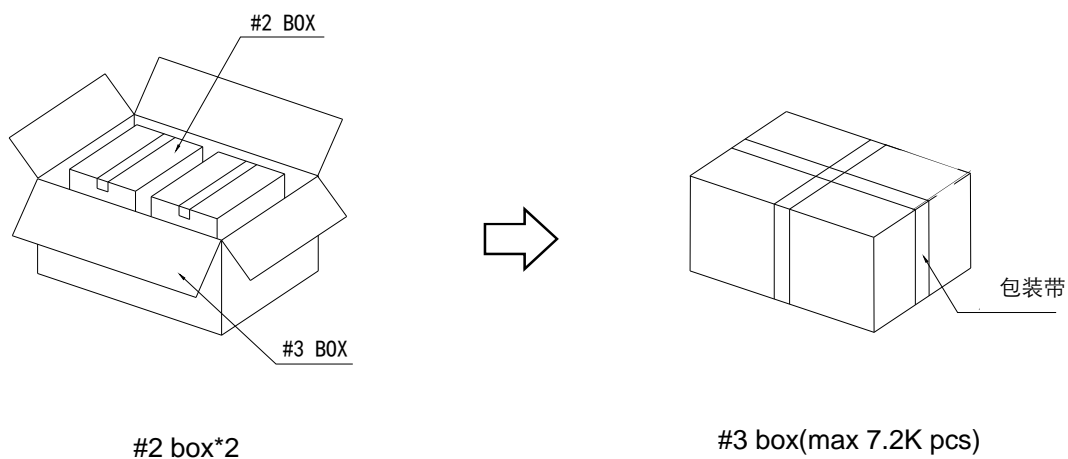
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### Packing Specification

- 1.Fixed quantity (max 150pcs) of the products are packed into a tray
- 2.Up to twenty-five trays stack together and should be fixed
3. The fixed trays are put into #2 Box(max 3.6Kpcs )
4. Two #2 Boxes are put into #3 Box(max 7.2Kpcs )
- 5.Paste packing slip



SIT204F-01 (max 150pcs)



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