

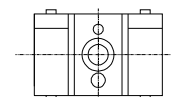
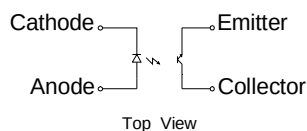
SIT612

Photo Interrupter

Dimensions

(unit: mm)

The SIT612 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/ Low cost
- RoHS Compliance

Applications

- Printer
- VTR
- Cassette mecha
- Car stereo

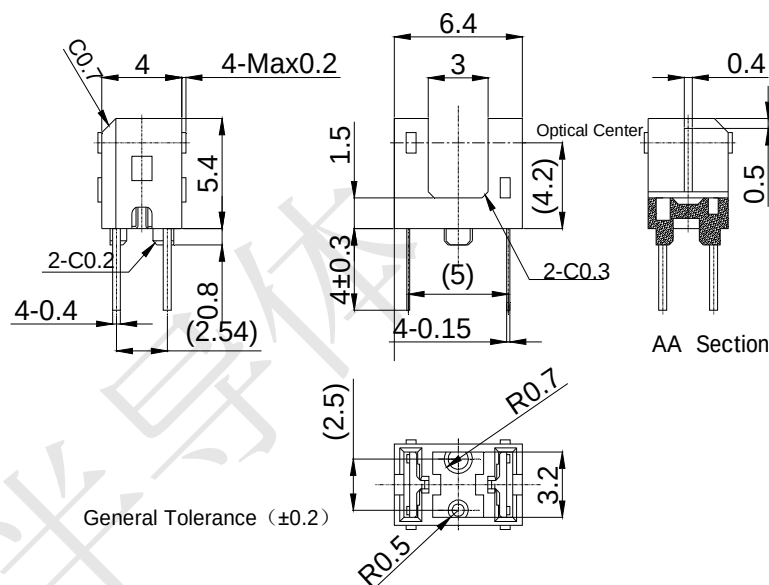
Maximum Ratings

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

*1. No icebond or dew

*2. The soldering should be 1.2mm away from bottom of the holder t=within 3s



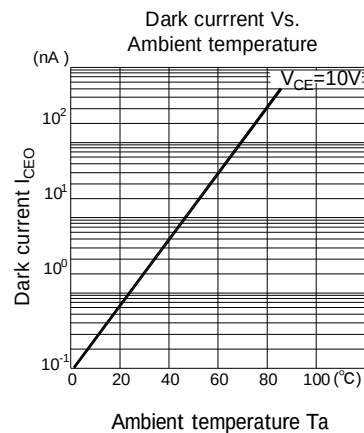
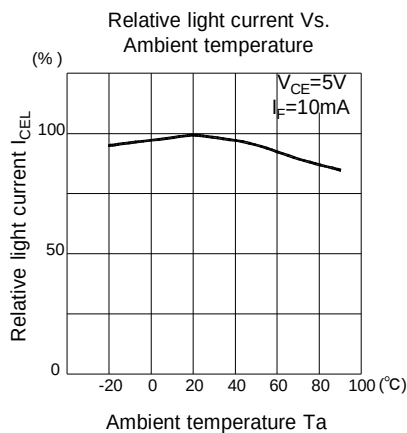
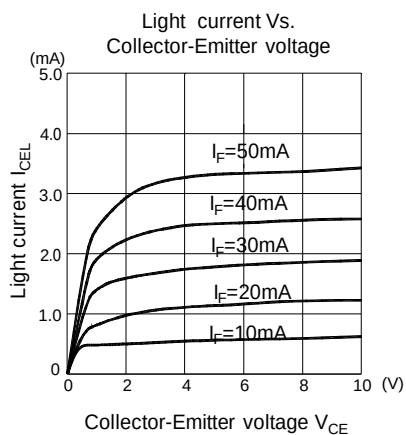
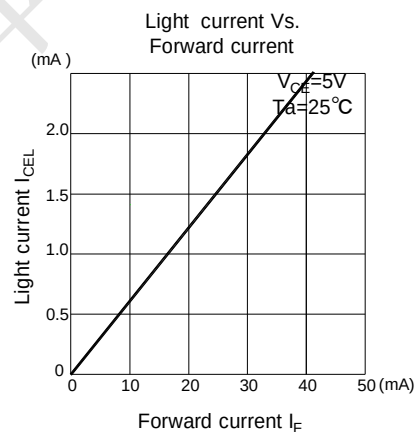
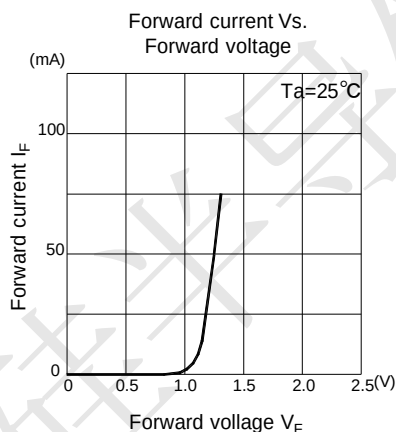
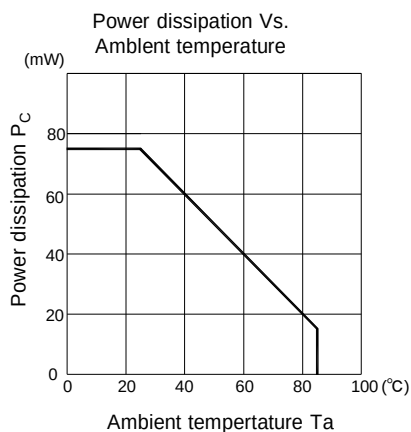
The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

SIT612

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}	$V_{CE}=10\text{V}$ $E_V=0\text{ lx}$	-	3	100	nA
	Peak SENS.Wavelength	λ_P	-	-	880	-	nm
Transfer characteristics	Light current	I_{CEL}	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$ Non-Shading	0.2	-	4.5	mA
	Leak current	I_{CEOD}	$I_F=20\text{mA}$ $V_{CE}=5\text{V}$ Shading	-	0.5	10	μA
	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	$I_C=100\mu\text{A}$ $V_{CC}=5\text{V}$ $R_L=1\text{K } \Omega$	-	50	-	μs
	Fall time	t_f		-	50	-	μs

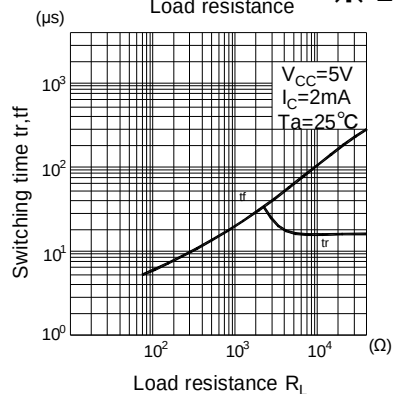


The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

Photo Interrupter

SIT612

Switching time Vs. Load resistance ※ 1



Emitting diode Relative intensity Vs. Wavelength

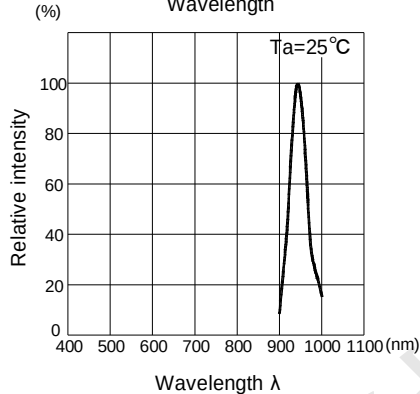
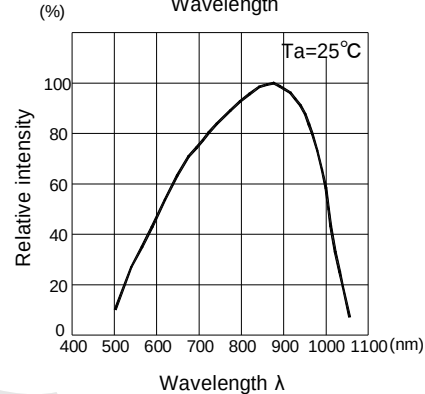
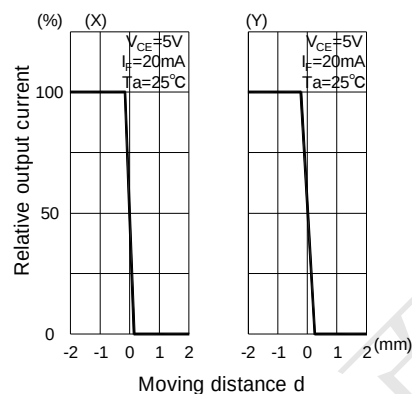


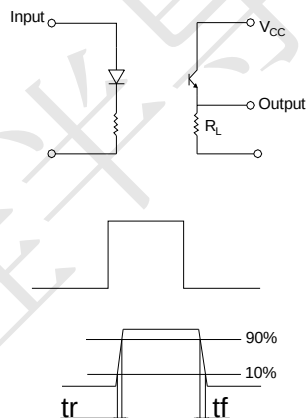
Photo transistors relative sensitivity Vs. Wavelength



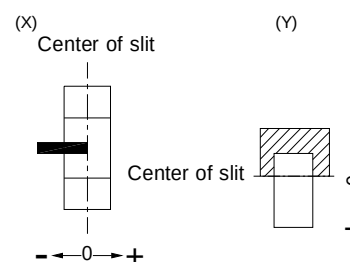
Relative output current Vs. Moving distance ※ 2



Switching time measurement circuit ※ 1



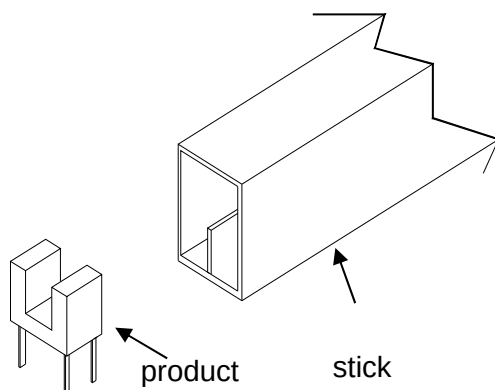
Method of measure position detection characteristic ※ 2



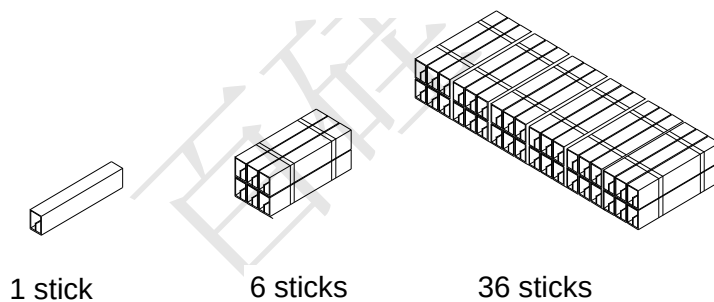
The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

Packing Specification

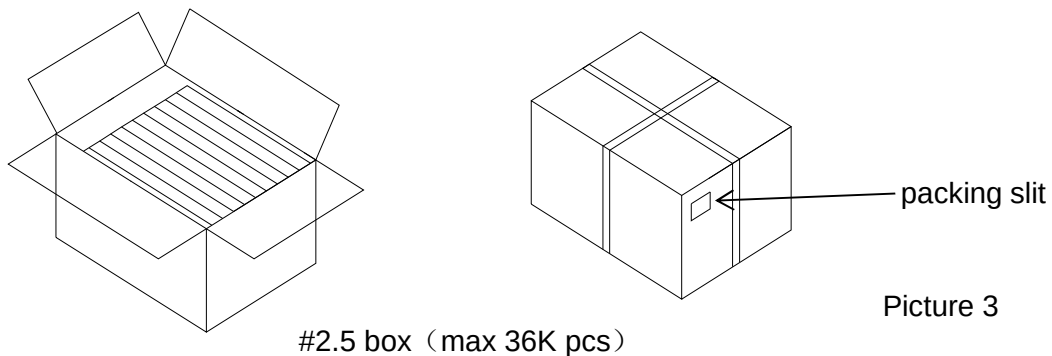
1. Place the specified (Max 100 pcs) number of products in a stick, (see picture 1)
2. 6 sets of sticks are tied by rubber band, 36 sets of sticks are put into a plastic bag (200*580) (see picture 2)
3. Put 10 plastic bags (filled with 36 sticks of products) into #2.5 Box (460*340*310)
4. Packing Slit is put on the surface of Outer-box (see picture 3)



Picture 1



Picture 2



Picture 3

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.