

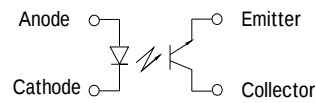
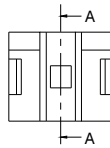
SIT205

Photo Interrupter

Dimensions

Unit:mm

The SIT205 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.



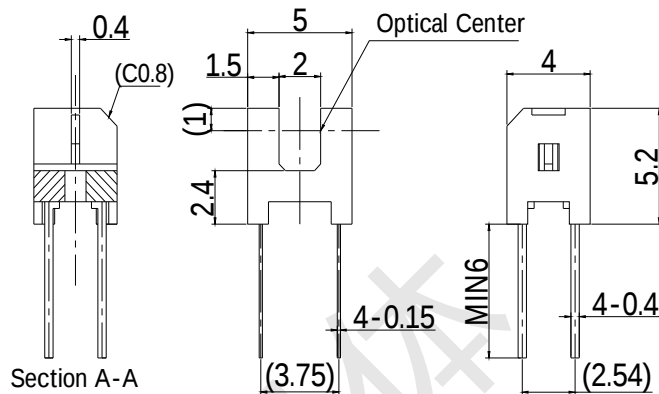
TOP VIEW

Features

- PCB direct mount type
- GAP:2.0mm
- Compact
- RoHS Compliance

Applications

- Printers
- FAX
- Cameras
- CD-ROM

* General Tolerance($\pm 0.2\text{mm}$)

Maximum Ratings

(Ta=25°C)

Item		Symbol	Ratings	Unit
Input	Power dissipation	P_D	75	mW
	Forward current	I_F	60	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~+100	°C
Soldering temperature *1		Tsol.	260	°C

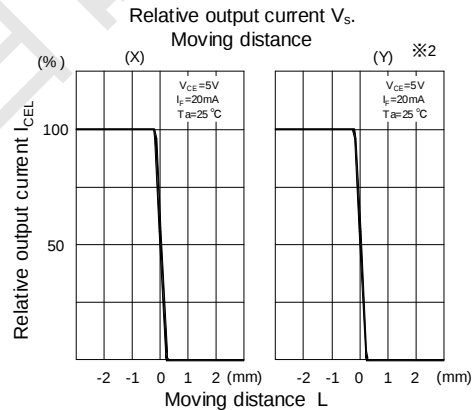
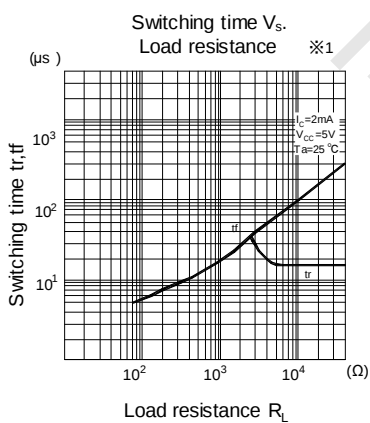
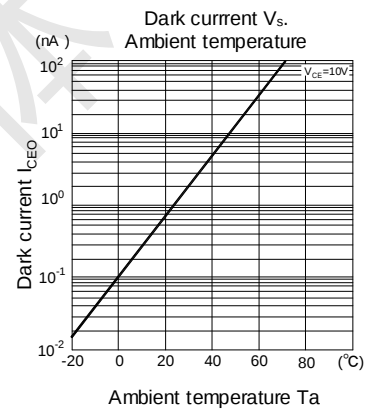
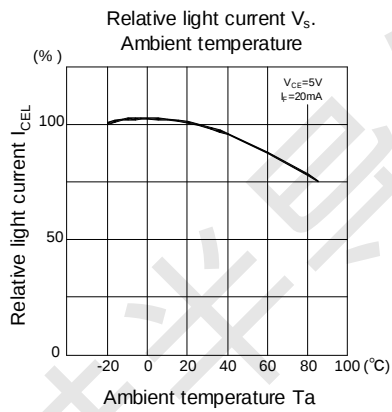
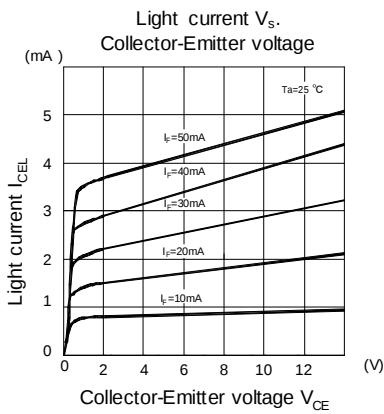
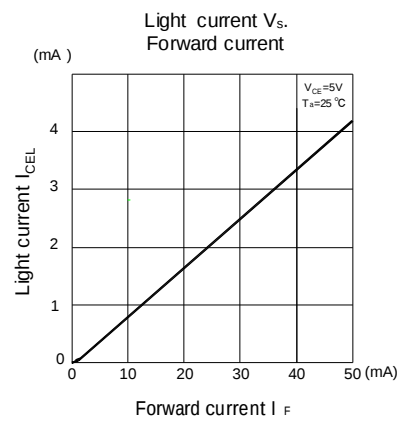
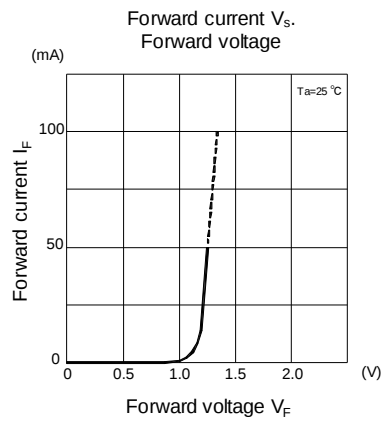
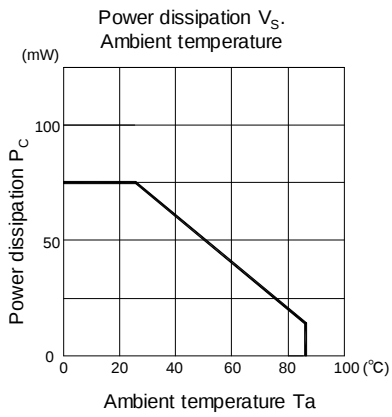
* 1.The soldering should be 1.2mm away from bottom of the holder. t=within 3s

Electro-Optical Characteristics

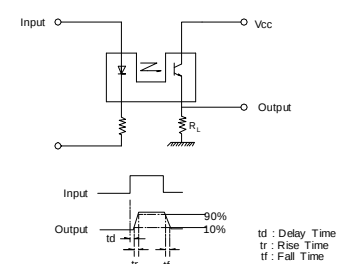
(Ta=25°C)

Item		Symbol	Conditions	Min	Typ	Max	Unit
Input	Forward voltage	V_F	$I_F=20\text{mA}$	-	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	$I_F=10\text{mA}, V_{CE}=5\text{V}, \text{Non-shading}$	0.7	-	2.5	mA
	Leak current	I_{CEOD}	$I_F=10\text{mA}, V_{CE}=5\text{V}, \text{Shading}$	-	0.5	10	μA
	C-E saturation voltage	$V_{CE}(\text{sat})$	$I_F=10\text{mA}, I_C=0.03\text{mA}$	-	0.15	0.4	V
	Rise time	tr	$I_C=0.1\text{mA}, V_{CC}=5\text{V}, R_L=1\text{K}\Omega$	-	50	150	μs
	Fall time	tf		-	50	150	μs

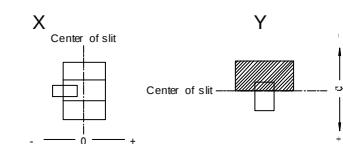
The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.



*1 Switching time measurement circuit



*2 Method of measuring position detection characteristic



Packing Specification

- 1.Fixed quantity (max 200pcs) of the products are packed into plastic bag
- 2.Ten bags of the products are put into #1 box(max 2000pcs)
3. Ten #1 Boxes are put into #2 Box(max 20000pcs)
4. Two #2 Boxes are put into #3 Box(max 40000pcs)
5. Packing slip is pasted on #3 box.

