

SG23FI(2)

The SG23FI(2) Photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

Features

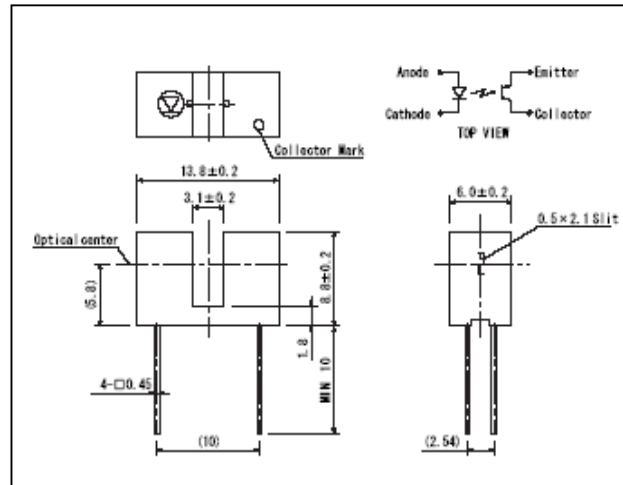
- PWB direct mount type
- GAP : 3.1mm
- Widely applicable

Applications

- Printers
- Facsimiles
- Scanners

Dimensions

(Unit : mm)



Absolute Maximum Ratings

[Ta = 25°C]

Description		Symbol	Ratings	Unit
Input	Power dissipation	P _D	100	mW
	Forward current	I _F	60	mA
	Reverse voltage	V _R	5	V
	Pulse forward current *1	I _{FP}	1	A
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 temp. *2		T _{opr.}	-20~+85	°C
Storage temp. *2		T _{stg.}	-30~+85	°C
Soldering temp. *3		T _{sol.}	260	°C

*1. Pulse width tw≤100us period T=10ms

*2. No icebound or dew

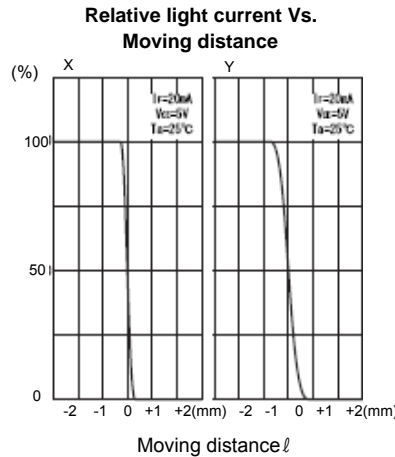
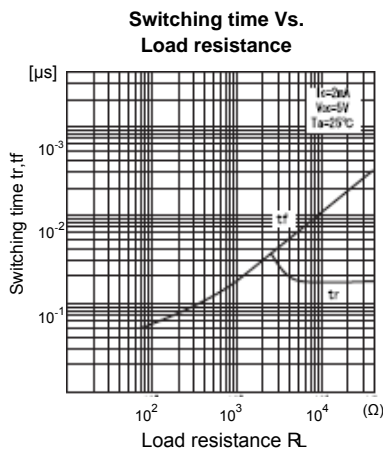
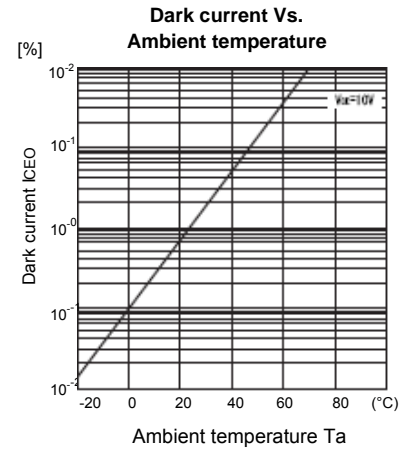
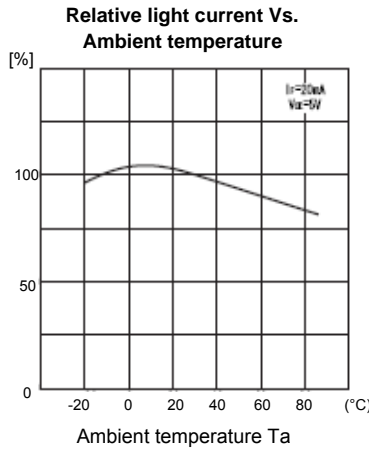
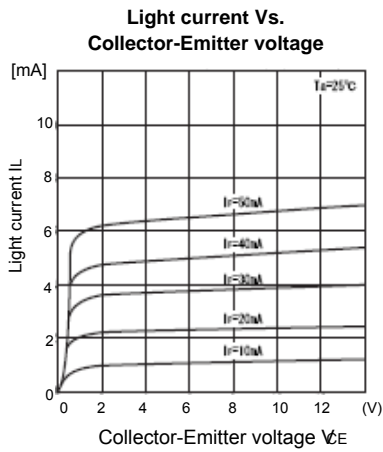
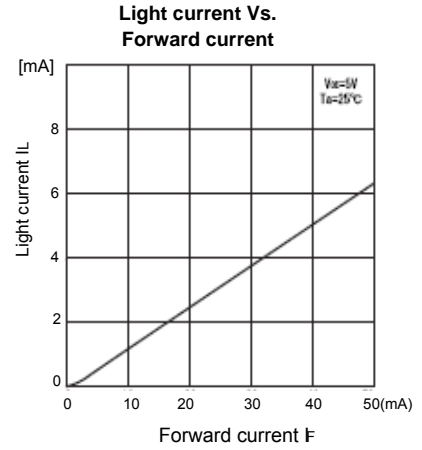
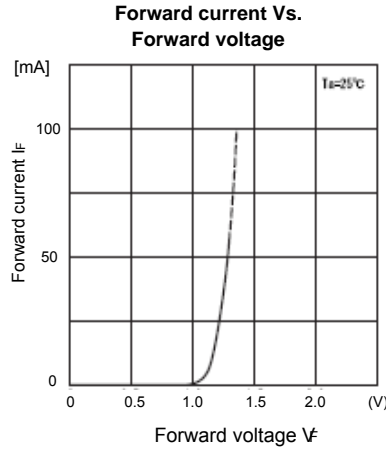
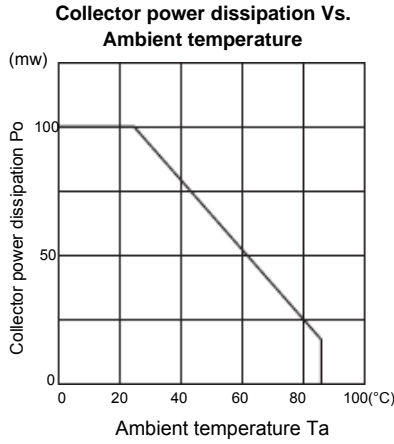
*3. For MAX 5 seconds at the position of 1mm from the resin edge

Electro-Optical Characteristics

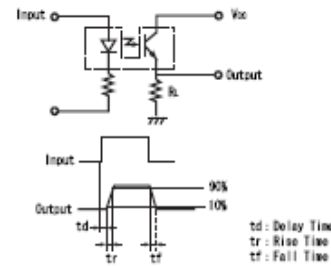
[Vcc= 5V, Ta = 25°C]

Parameter		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	λ _p	I _F =20mA	-	940	-	nm
Output	Collector dark current	I _{CEO}	V _{CE} =10V, 0 lx	-	-	100	nA
Transmission	Light current	I _C	I _F =20mA, V _{CE} =5V, Non-shading	0.1	-	10	mA
	C-E saturation Voltage	I _{CE(sat)}	I _F =20mA, I _C =0.1mA	-	0.15	0.4	V
	Rise time	t _r	V _{CC} =5V, I _C =2mA, R _L =100Ω	-	4	-	μs
	Fall time	t _f		-	5	-	μs

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Switching time measurement circuit



Method of measuring position characteristic

