

Photointerrupters(Transmissive)

KODENSHI

SG - 266

The SG - 266 photointerrupter high - performance standard type, combines high - output GaAs IRED with high sensitive phototransistor.

FEATURES

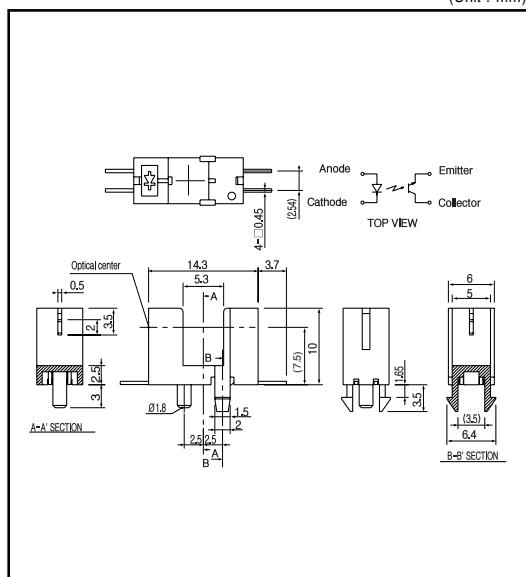
- PWB direct mount type
- GAP : 5.3mm
- Snap-in mount
- With the installation positioning boss

APPLICATIONS

- Printers
- Facsimiles
- CD changers
- Amusement machines

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 °C)

Item	Symbol	Rating	Unit
Input	Power dissipation	P _D	mW
	Forward current	I _F	mA
	Reverse voltage	V _R	V
	Pulse forward current ¹⁾	I _{FP}	A
Output	Collector power dissipation	P _C	mW
	Collector current	I _C	mA
	C - E voltage	V _{CEO}	V
	E - C voltage	V _{ECD}	V
Operating temp. ²⁾		Topr.	-20 ~ +85
Storage temp. ²⁾		Tstg.	-30 ~ +85
Soldering temp. ³⁾		Tsol.	260

¹⁾ 1. pulse width : t w 100 sec, period : T=10msec.

²⁾ No icebound or dew

³⁾ For MAX.5 seconds at the position of 1mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

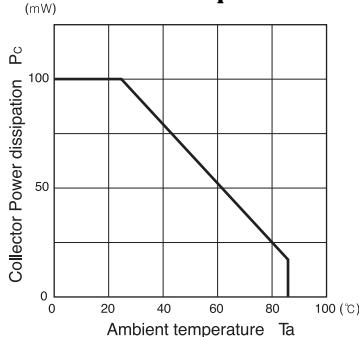
(Ta=25 °C)

Item	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	I _F =20mA	940		nm
Output	Collector dark current	I _{CEO}	I _C =10V	1	100	nA
	Light current	I _C	I _F =20mA, V _E =5V, Non-shading	0.5	10	mA
Transmiss.	Leakage current	I _{CEO}	I _F =20mA, V _E =5V(shading)	0.5	10	μA
	C - E saturation voltage	V _{CE(sat)}	I _F =20mA, I _C =0.1mA	0.15	0.4	V
	Rise time	tr	V _{CC} =5V, I _C =2mA, R=100	4		usec.
	Fall time	tf		5		usec.

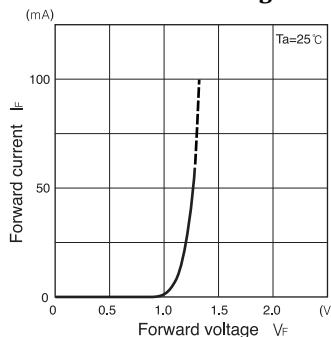
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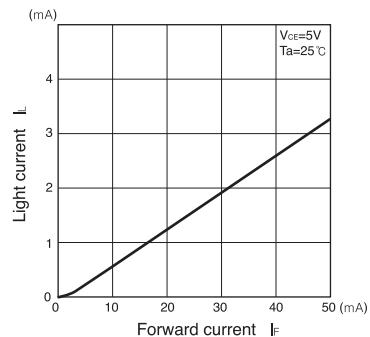
**Collector power dissipation Vs.
Ambient temperature**



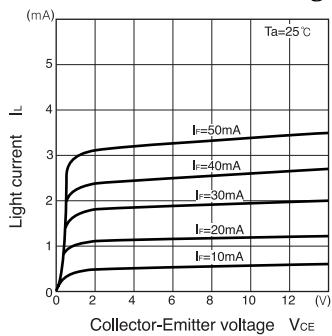
**Forward current Vs.
Forward voltage**



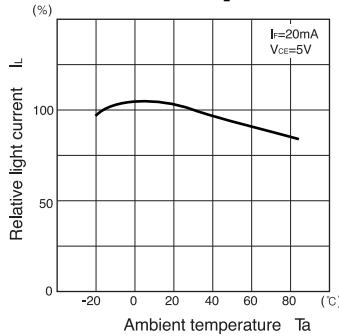
**Light current Vs.
Forward current**



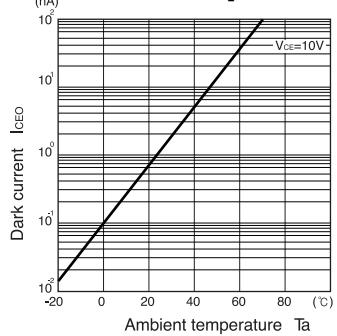
**Light current Vs.
Collector-Emitter voltage**



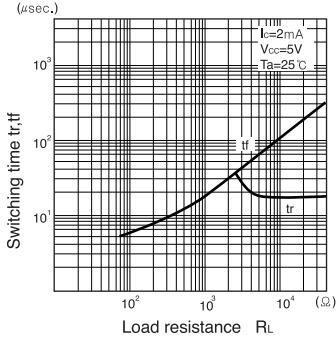
**Relative light current Vs.
Ambient temperature**



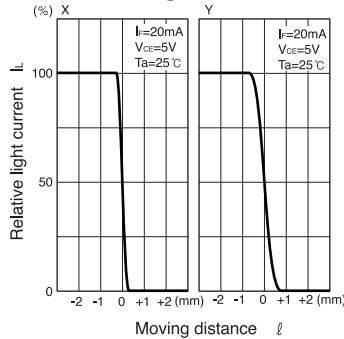
**Dark current Vs.
Ambient temperature**



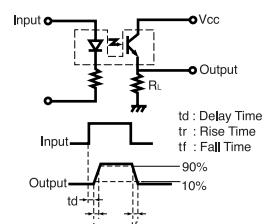
**Switching time Vs.
Load resistance**



**Relative light current Vs.
Moving distance**



Switching time measurement circuit



Method of measuring position detection characteristic

