

Photointerrupters(Transmissive)

KODENSHI

SG - 260

The SG - 260 photointerrupter high - performance standard type, combines high - output GaAs IRED with high sensitive phototransistor.

FEATURES

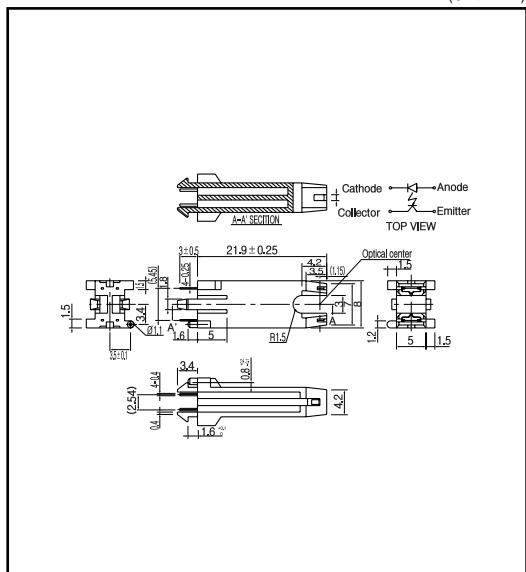
- PWB direct mount type
- GAP : 3.0mm
- Snap-in mount
- With the installation positioning boss
- Optical axis height from the mounting surface :20.75mm

APPLICATIONS

- VTR
- Cassette mecha

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 °C)

Item	Symbol	Rating	Unit
Input	P _D	75	mW
	I _F	50	mA
	V _R	5	V
	I _{FP}	0.5	A
Output	P _C	75	mW
	I _C	20	mA
	V _{CEO}	30	V
	V _{ECD}	5	V
Operating temp. ⁻²	Topr.	- 20 ~ +85	
Storage temp. ⁻²	Tstg.	- 30 ~ +100	
Soldering temp. ⁻³	Tsol.	260	

*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

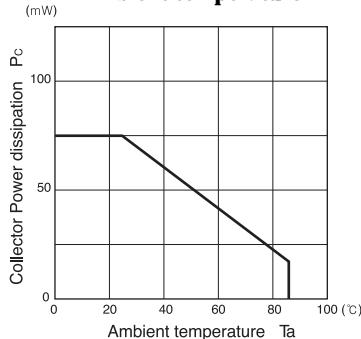
(Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	V _F	I _F =20mA		1.2	1.4	V
	I _R	V _R =5V			10	μA
	p	I _F =20mA		940		nm
Output	I _{CEO}	I _F =10V		1	100	nA
Transmiss.	I _C	I _F =20mA, V _E =5V, Non-shading	0.5		5	mA
	I _{CEO}	I _F =20mA, V _E =5V(shading)		0.5	10	μA
	V _{CE(sat)}	I _F =20mA, I _C =0.05mA		0.15	0.4	V
	tr	V _{CC} =5V, I _C =0.1mA, R=1K		50		μsec.
	tf			50		μsec.

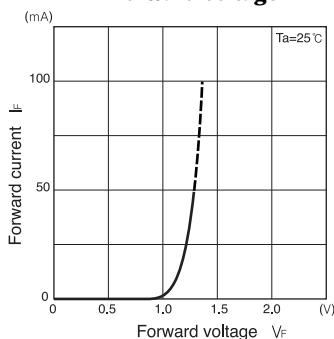
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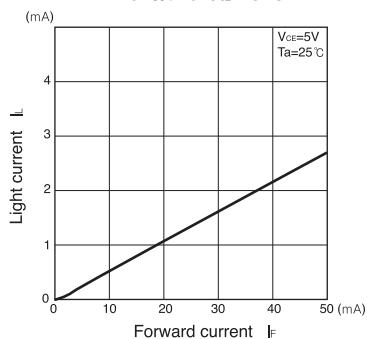
**Collector power dissipation Vs.
Ambient temperature**



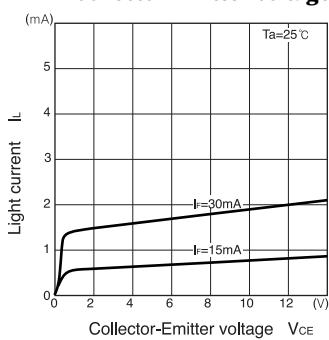
**Forward current Vs.
Forward voltage**



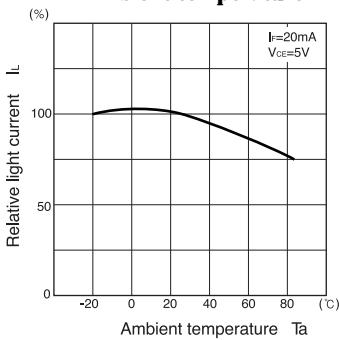
**Light current Vs.
Forward current**



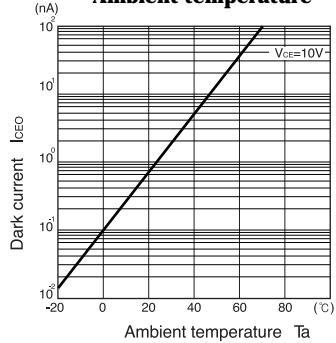
**Light current Vs.
Collector-Emitter voltage**



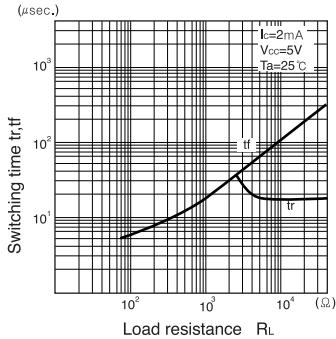
**Relative light current Vs.
Ambient temperature**



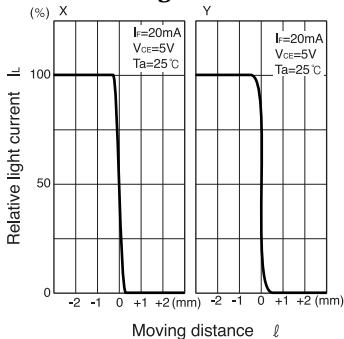
**Dark current Vs.
Ambient temperature**



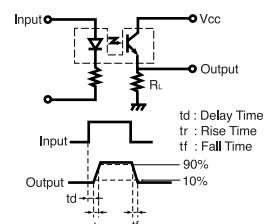
**Switching time Vs.
Load resistance**



**Relative light current Vs.
Moving distance**



Switching time measurement circuit



Method of measuring position detection characteristic

