

Photointerrupters(Transmissive)

KODENSHI

SG - 267

The SG-267 photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

FEATURES

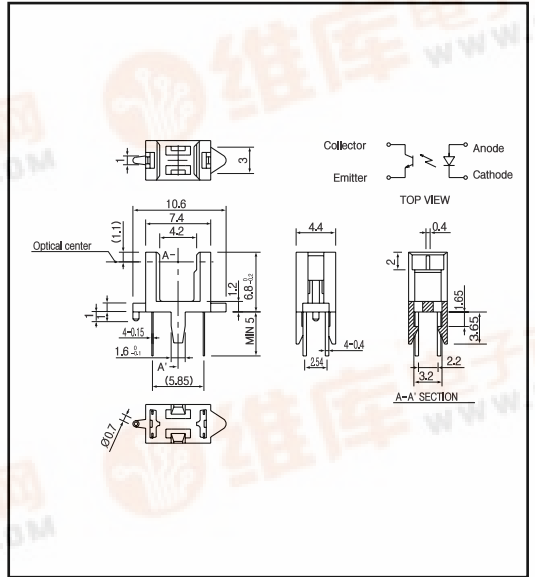
- PWB direct mount type
- GAP : 4.2mm
- Snap-in mount
- With the installation positioning boss

APPLICATIONS

- Cassette mecha
- Facsimiles
- CD changers
- VTR

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit	
Input	Power dissipation	P _b	75	mW
	Forward current	I _F	50	mA
	Reverse voltage	V _R	5	V
	Pulse forward current ^{*1}	I _{FP}	0.5	A
Output	Collector power dissipation	P _c	75	mW
	Collector current	I _c	20	mA
	C - E voltage	V _{CEO}	30	V
	E - C voltage	V _{ECO}	5	V
Operating temp. ^{*2}	Topr.	-20 ~ +85		
Storage temp. ^{*2}	Tstg.	-30 ~ +100		
Soldering temp. ^{*3}	Tsol.	260		

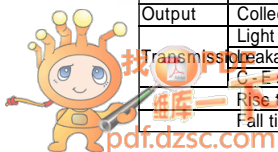
*1. pulse width : t_w 100 μsec, period : T=10msec.

*2. No icebound or dew *3. For MAX.5 seconds at the position of 1mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

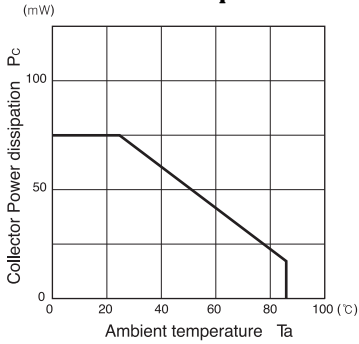
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	I _F =20mA		1.2	1.4	V
	Reverse current	I _R V _R =5V			10	μA
Output	Peak wavelength	I _F =20mA		940		nm
	Collector dark current	I _{CEO} V _{CE} =10V		1	100	nA
Light	Light current	I _L I _F =20mA, V _E =5V, Non-shading	0.2		5	mA
	Leakage current	I _{CEO(D)} I _F =20mA, V _E =5V(shading)		0.5	5	μA
C-E	C-E saturation voltage	V _{CE(sat)} I _F =20mA, I _c =0.05mA		0.15	0.4	V
	Rise time	t _r V _{CC} =5V, I _c =0.1mA, R=1K		50		μsec.
Fall	time	t _f V _{CC} =5V, I _c =0.1mA, R=1K		50		μsec.



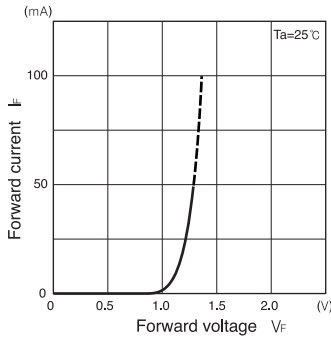
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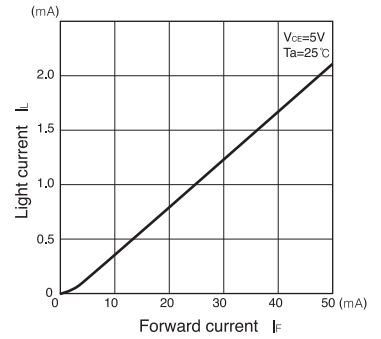
Collector power dissipation Vs. Ambient temperature



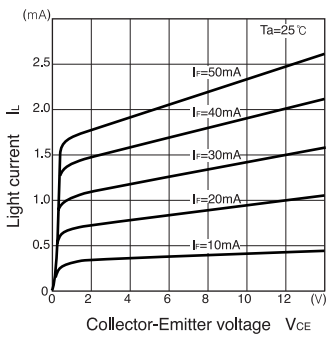
Forward current Vs. Forward voltage



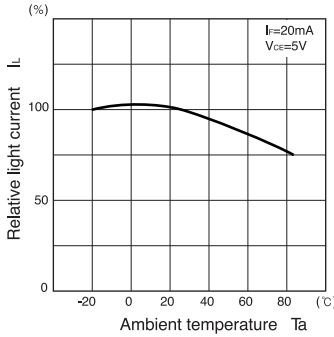
Light current Vs. Forward current



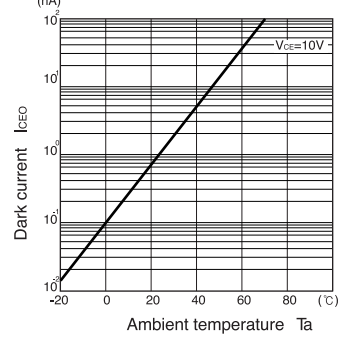
Light current Vs. Collector-Emitter voltage



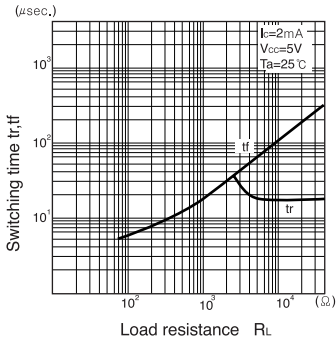
Relative light current Vs. Ambient temperature



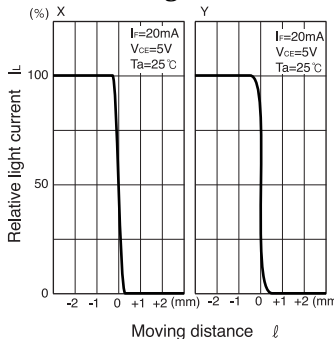
Dark current Vs. Ambient temperature



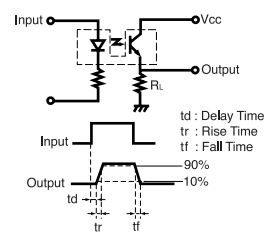
Switching time Vs. Load resistance



Relative light current Vs. Moving distance



Switching time measurement circuit



Method of measuring position detection characteristic

