Photointerrupter(Transmissive)

KODENSHI

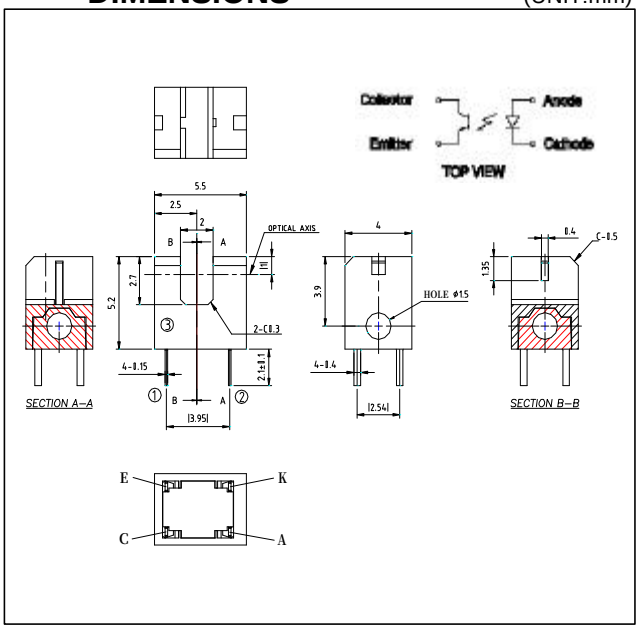
KSG-262

DESCRIPTION

The KSG-262 photointerrupter is high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor, Compact size.

DIMENSIONS

(UNIT:mm)



FEATURES

- Screw - mount type
- GAP : 2.0mm
- Compact
- Widely applicable

APPLICATIONS

- Floppy disk drives
- CD-ROM drives
- Printers
- Facsimiles
- Cameras

ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

Parameter		Symbol	Rating	Unit
Input	Forward Current	I_F	50	mA
	Pulse Forward Current *1	I_{FP}	0.5	A
	Reverse Voltage	V_R	5	V
	Power Dissipation	P_D	75	mW
Output	Collector Emitter Voltage	BV_{CEO}	30	V
	Emitter Collector Voltage	BV_{ECO}	5	V
	Collector Current	I_C	20	mA
	Collector Power Dissipation	P_C	75	mW
Operating Temperature *2		T_{OPR}	-20 ~ +85	℃
Storage Temperature *2		T_{STG}	-30 ~ +100	℃
Soldering Temperature *3		T_{SOL}	260	℃

*1. tw≤100 μsec.period : T=10msec

*2. No icebound or dew

*3. For MAX. 5 seconds at the position of 2mm from the package

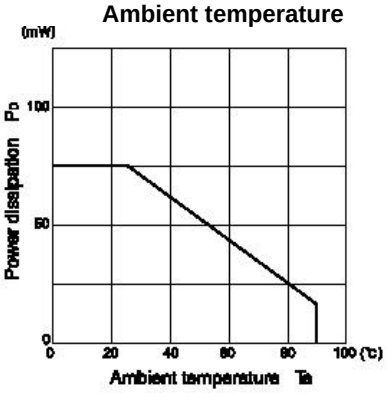
ELECTRO-OPTICAL CHARACTERISTICS (Ta=25℃)

Parameter			Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward Voltage		V_F	I_F=20mA	-	1.25	1.5	V
	Reverse Current		I_R	V_R=5V	-	-	10	μA
	Capacitance		C_D	V=0, f=1KHz	-	25	-	pF
	Peak Wavelength		λ_P	I_F=20mA	-	940	-	nm
Output	Dark Current		I_{CEO}	V_{CE}=10V, E_V=0LX	-	1.0	100	nA
Coupled	Collector Current		I_C	V_{CE}=5V, I_F=20mA (Non-shading	0.25	-	2.5	mA
	Leakage Current		I_{CEOD}	V_{CE}=5V, I_F=10mA (shading)	-	0.5	10	μA
	Collector Emitter Saturation Voltage		$V_{CE(SAT)}$	I_F=10mA, I_C=0.3mA	-	0.15	0.4	V
	Response Time	Rise Time	t_r	V_{CC}=5V, I_C=0.1mA, R_L=1kΩ	-	20	-	μs
		Fall Time	t_f		-	20	-	μs

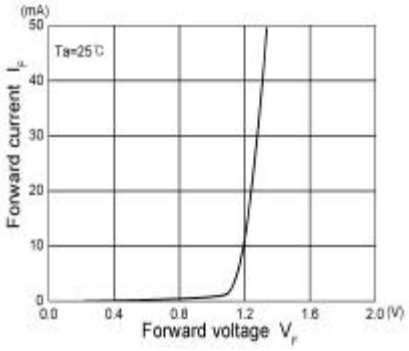
Photointerrupter(Transmissive)

KSG-262

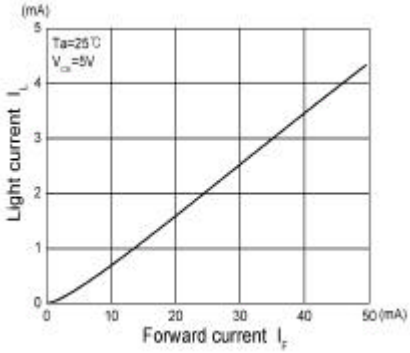
Power dissipation Vs. Ambient temperature



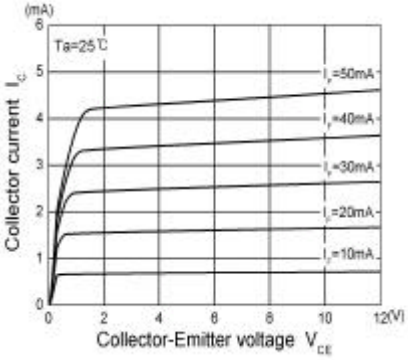
Forward current Vs. Forward voltage



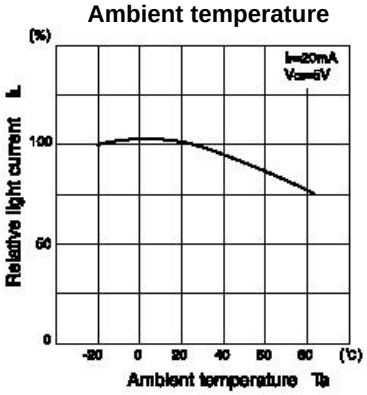
Light current Vs. Forward current



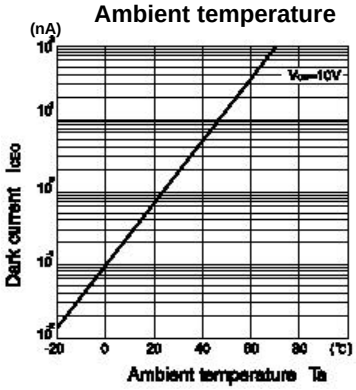
Light current Vs. Collector-Emitter voltage



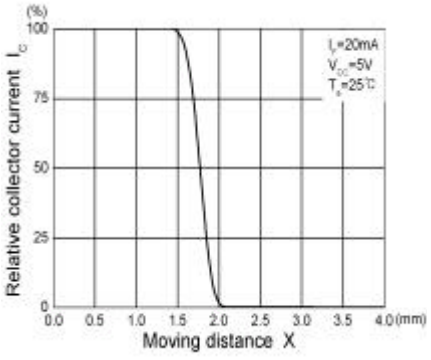
Relative light current Vs. Ambient temperature



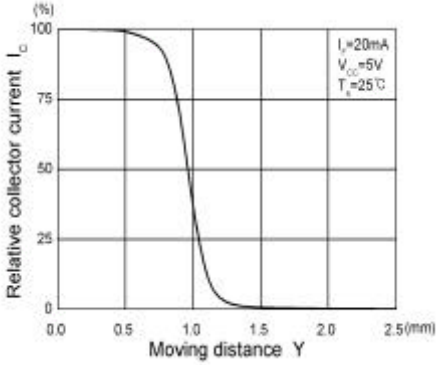
Dark current Vs. Ambient temperature



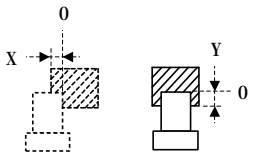
Relative light current Vs. Moving distance



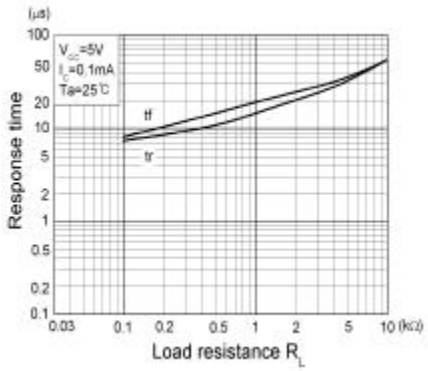
Relative light current Vs. Moving distance



Method of measuring postion detection characteristic



Switching time Vs. Load resistance



Switching time measurement circuit