

## KSG-262

### DESCRIPTION

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

### FEATURES

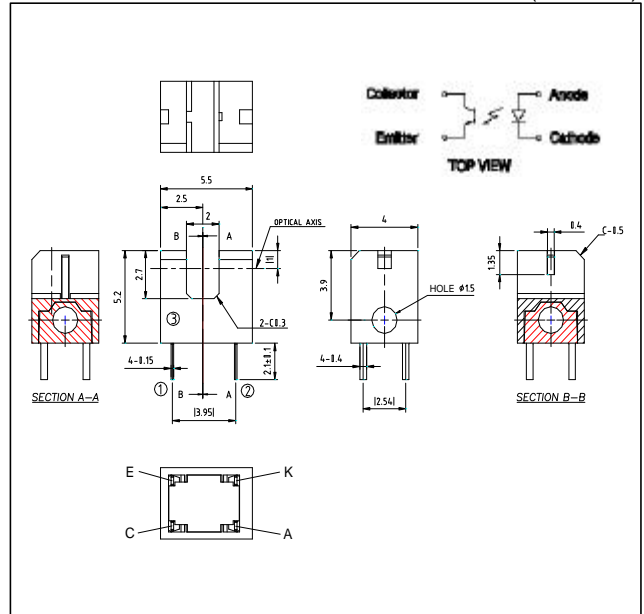
- Screw - mount type
- GAP : 2.0mm
- Compact
- Widely applicable

### APPLICATIONS

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

### DIMENSIONS

(UNIT:mm)



### ABSOLUTE MAXIMUM RATINGS (Ta=25 )

Parameter		Symbol	Rating	Unit
Input	Forward Current	$I_F$	50	mA
	Pulse Forward Current <sup>*1</sup>	$I_{FP}$	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 <sup>*2</sup>		$T_{OPR}$	-20 ~ +85	
Storage Temperature <sup>*2</sup>		$T_{STG}$	-30 ~ +100	
Soldering Temperature <sup>*3</sup>		$T_{SOL}$	260	

\*1. tw 100  $\mu$ sec.period : T=10msec

\*2. No icebound or dew

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

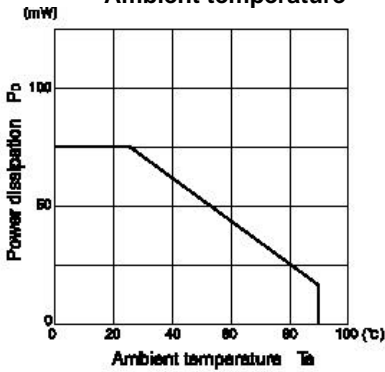
### ELECTRO-OPTICAL CHARACTERISTICS (Ta=25 )

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	$\mu A$
	Capacitance	$C_D$	$V=0, f=1KHz$	-	25	-	pF
	Peak Wavelength	$\lambda_P$	$I_F=20mA$	-	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	$\mu A$
	Collector Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_F=10mA, I_C=0.3mA$	-	0.15	0.4	V
	Response Time	Rise Time	$t_r$	$V_{CC}=5V, I_C=0.1mA, R_L=1k$	-	20	-
Fall Time		$t_f$	-		20	-	$\mu s$

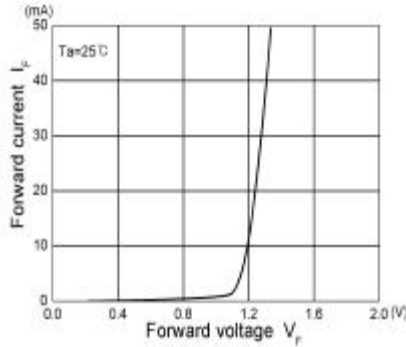
# Photointerrupter(Transmissive)

## KSG-262

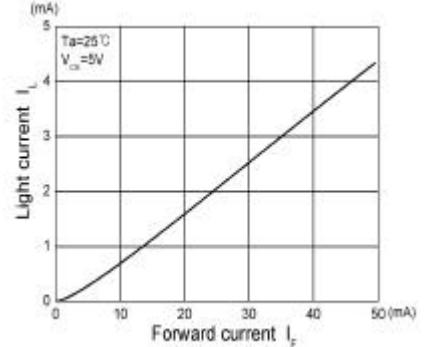
Power dissipation Vs. Ambient temperature



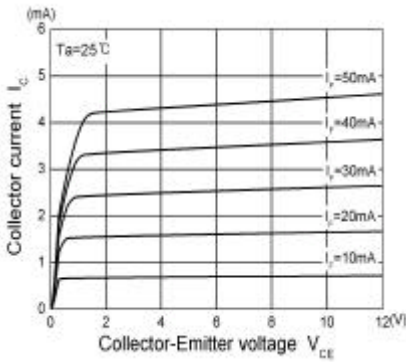
Forward current Vs. Forward voltage



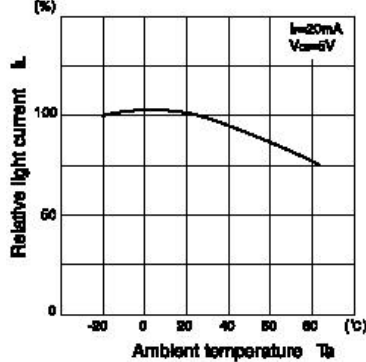
Light current Vs. Forward current



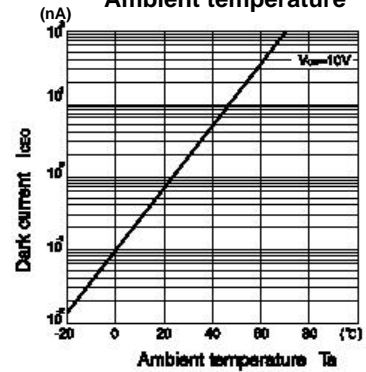
Light current Vs. Collector-Emitter voltage



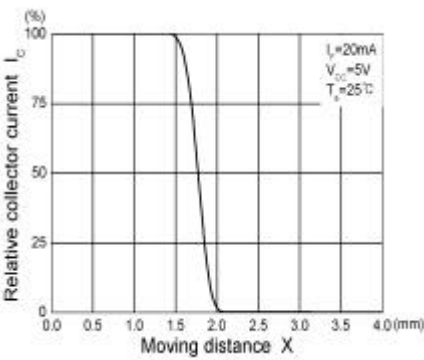
Relative light current Vs. Ambient temperature



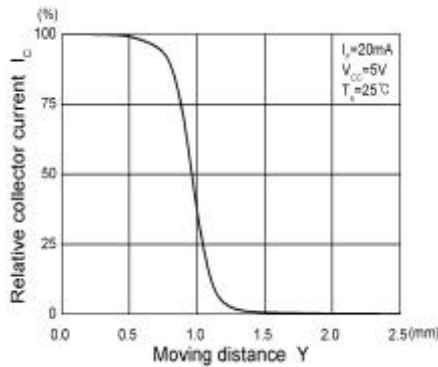
Dark current Vs. Ambient temperature



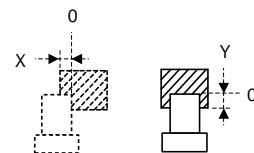
Relative light current Vs. Moving distance



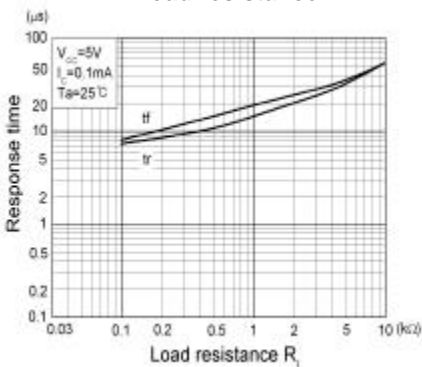
Relative light current Vs. Moving distance



Method of measuring position detection characteristic



Switching time Vs. Load resistance



Switching time measurement circuit

