NEW PRODUCT

KODENSHI AUK

SIR-SD5
Photo Interrupter (Reflective)

SIR-SD5 reflective sensor combines a GaAs IrED with a high-sensitivity phototransistor in a super-mini (Φ4) ceramic package, reducing installation space.

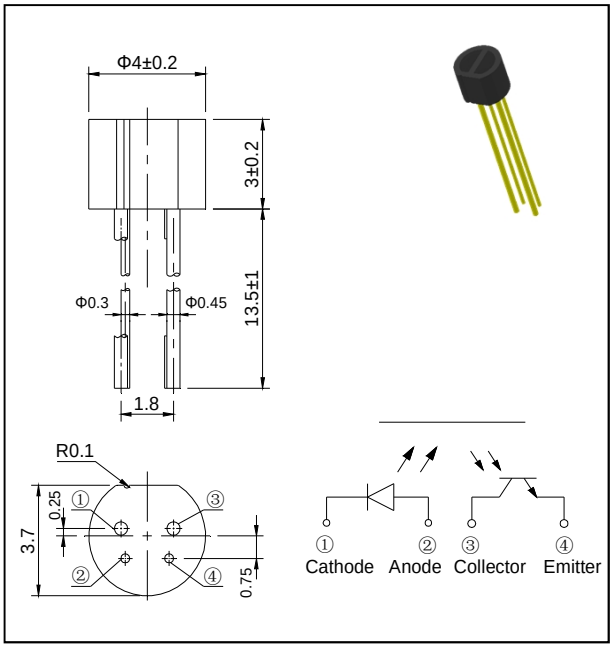
Features

- Compact (Φ4mm)
- High performance
- High-speed response
- Easy to mount on PCB
- Widely applicable

Application

- Timing sensors
- Edge sensors
- Level sensors of liquid

Dimensions (Unit:mm)



MAXIMUM RATINGS (Ta= 25℃)

Item		Symbol	Rating	Unit
Input	Power dissipation	P_D	75	mW
	Reverse voltage	V_R	5	V
	Forward current	I_F	50	mA
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}	3	V
	Operating temp.	Topr.	-20～+90	℃
	Storage temp.	Tstg.	-30～+100	℃
	Soldering temp. *2	Tsol.	260	℃

*1. Lead Soldering Temperature(3mm from package for 5sec)

ELECTRO- OPTICAL CHARACTERISTICS (Ta= 25℃)

Items		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward voltage	V_F	I_F=4mA	-	-	1.2	V
	Reverse current	I_R	V_R=5V	-	-	10	μA
	Peak wavelength	λ_p	I_F=20mA	-	940	-	nm
Output	Collector dark current	I_{CEO}	V_{CEO}=10V	-	-	0.1	μA
	Light current	I_L	V_{CE}=2V , I_F=4mA	-	100	-	μA
	Leakage current	I_{CEOD}	V_{CE}=2V , I_F=4mA	-	-	0.1	μA
Switching speeds Rise time		tr	V_{CC}=2V, I_C= 100μA , R_L=1KΩ		30		μsec
Switching speeds Fall time		tf		-	30	-	μsec

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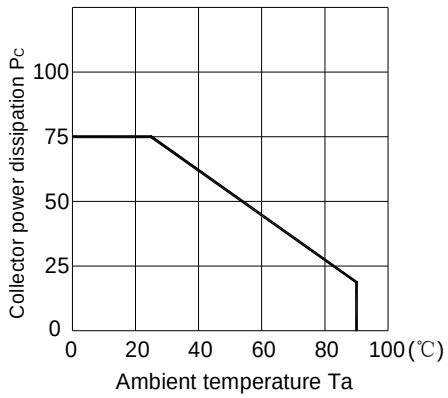
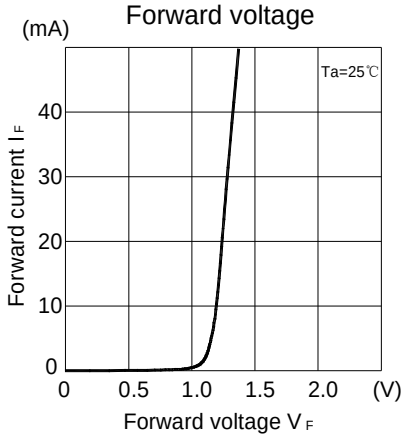
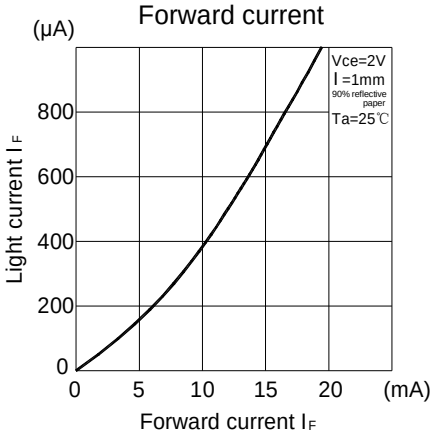
Collector power dissipation Vs. Ambient temperature



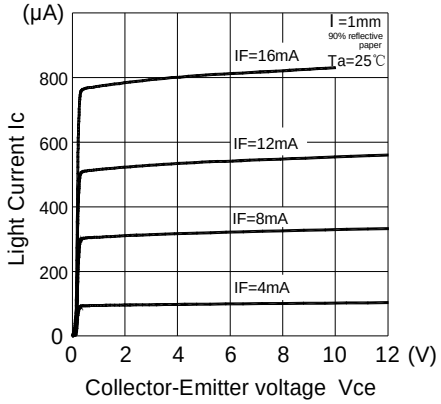
Forward current Vs. Forward voltage



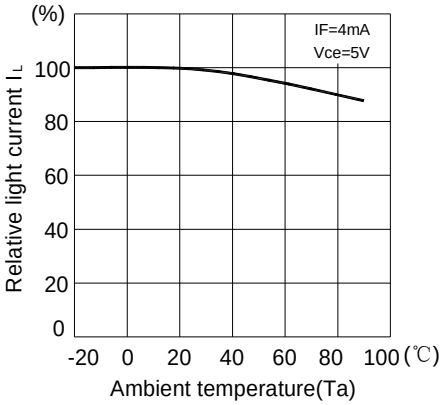
Light current Vs. Forward current



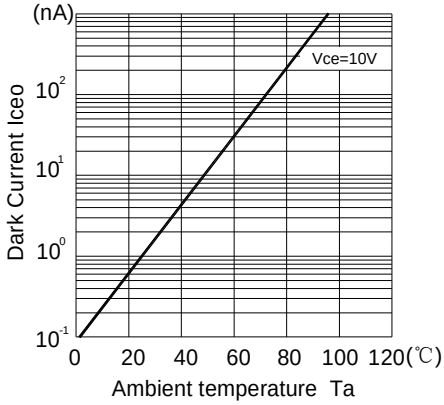
Light current Vs. Collector-Emitter Voltage



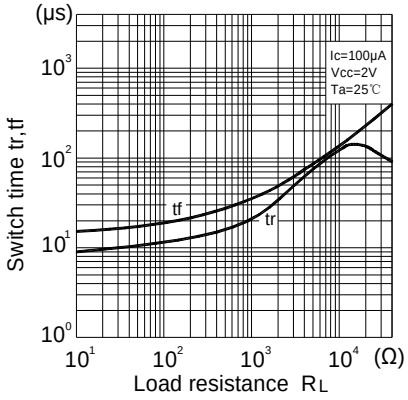
Relative light current Vs. Ambient temperature



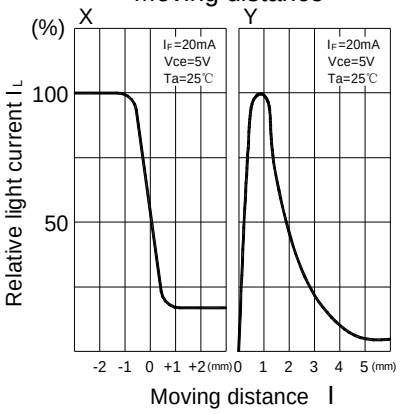
Dark Current Vs. Ambient temperature



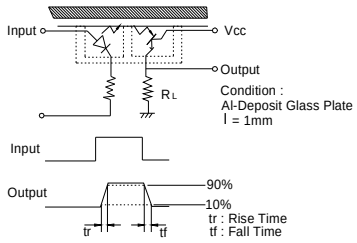
Switch time Vs. Load resistance



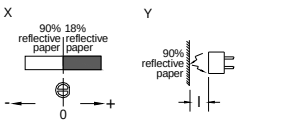
Relative light current Vs. Moving distance



Switching time measurement circuit



Method of measuring position detection charanteristic



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Packing Specification

1. Fixed quantity (500pcs) of the products are packed into plastic bag

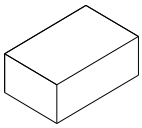
2. Seven bags of the products are put into #1 box

3. Ten #1 boxes are put into #2 box and two #2 boxes are put into #3 box(max 70,000pcs)

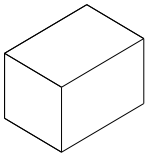
4. Packing slit is pasted on the out box

SIR-SD5 (500pcs)

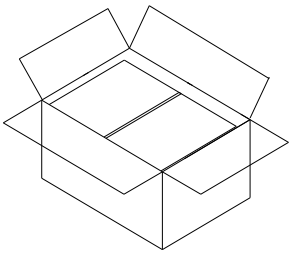
plastic bag * 7



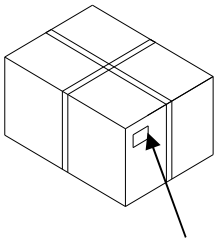
#1 box * 10



#2 box * 2



#3 box



packing slit