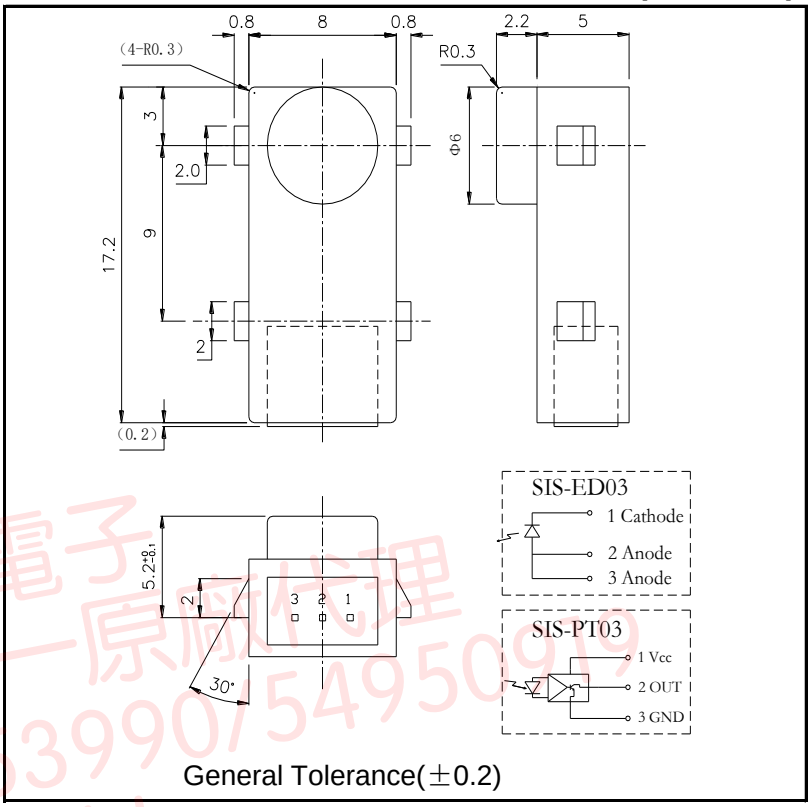
NEW PRODUCT

KODENSHI

SIS-ED03 & SIS-PT03
Photo Interrupter

A emitting diode and a photo IC with connector have been put in each package. The use of the emitter and detector as a pair enables it to work as a penetrative type photo-sensor of approximately 100mm (Can be practically used as a reflective type sensor). Can be used as a paper sensor due to easy equipping and its high anti-dust factor.

Dimensions (Unit: mm)



Features

- Anti-visible rays due to visible ray cut resin for detector type
- Connector type(JAE IL-Y type)
- Dust proof

Applications

- Printers
- FAX
- Copiers
- Scanners
- Amusement machines

MAXIMUM RATINGS (Ta=25℃)

Item		Symbol	Ratings	Unit
Input	Power dissipation	P_D	100	mW
	Forward current	I_F	60	mA
	Reverse voltage	V_R	5	V
Output	Supply voltage	Vcc	17	V
	Low level output current	Iol	30	mA
	Power dissipation	Pc	200	mW
Operating temperature*1 *2		Topr.	-20～+75	°C
Storage tempertature*1 *2		Tstg.	-30～+85	°C

*1. No icebound or dew

*2. For MAX 5 seconds at the position of 1mm from the resin edg

Photo Interrupter

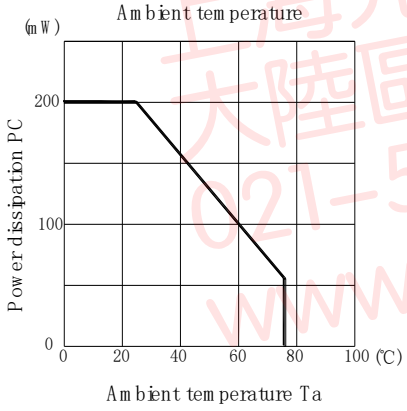
SIS-ED03& SIS-PT03

Elector-Optical Characteristics

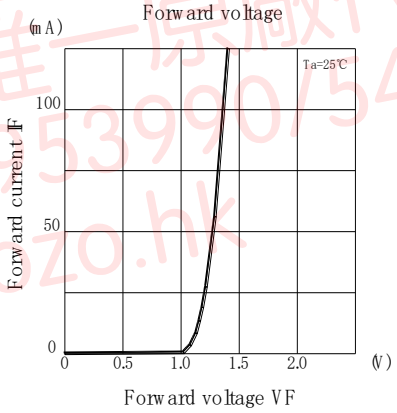
(Ta=25℃)

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Emitter	Forward voltage	V_F	I_F=20mA	-	1.2	1.4	V
	Reverse current	I_R	V_R=5V	-	-	10	uA
	Peak wavelength	λ_P	I_F=20mA	-	940	-	nm
	Half angle	$\Delta\theta$		-	±5	-	deg.
Detector	Supply voltage	Vcc		4.5	-	16.5	V
	Low level output voltage	V_{OL}	Vcc=5V, I_F=0mA, I_{OL}=16mA	-	-	0.4	V
	High level output voltage	V_{OH}	Vcc=5V, I_F=20mA, R_L=10kΩ, L=100mm	4.5	-	-	V
	Current consumption	I_{CC}	Vcc=5V	-	3	10	mA
	Half angle	$\Delta\theta$		-	±5	-	deg.
Transmission	Threshold input current	I_{FLH}	Vcc=5V, R_L=10kΩ, L=100mm	-	5	10	mA
	Hysteresis	I_{FHL}/I_{FLH}	Vcc=5V, R_L=10kΩ, L=100mm	0.5	0.8	0.95	-
	L→H propagation time	t_{PLH}	Vcc=5V, L=100mm, R_L=3.3kΩ	-	3	-	μs
	H→L propagation time	t_{PHL}		-	1	-	μs

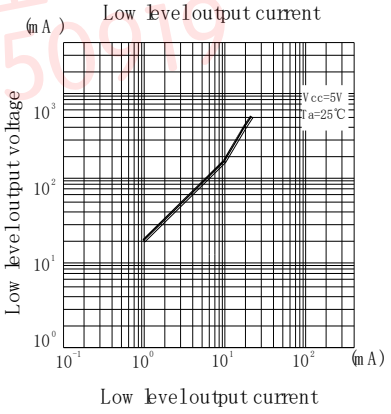
Power dissipation Vs. Ambient temperature



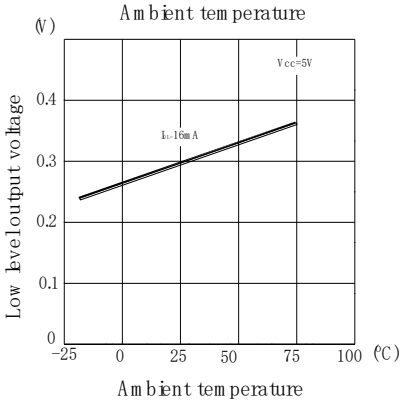
Forward current Vs. Forward voltage



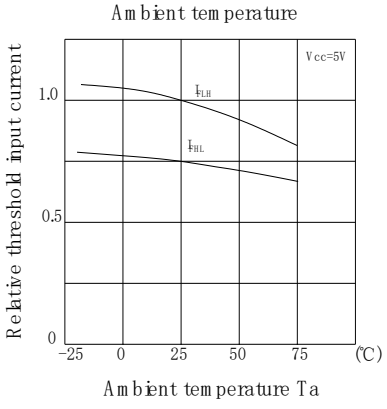
Low Level output voltage Vs. Low level output current



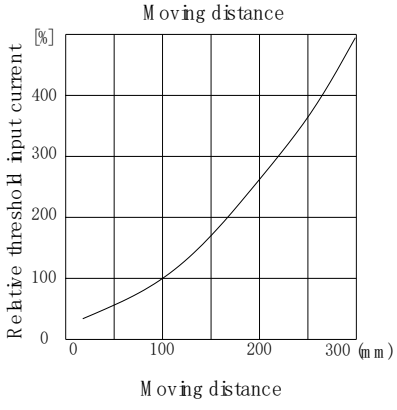
Low level output voltage Vs. Ambient temperature



Relative threshold input current Vs. Ambient temperature



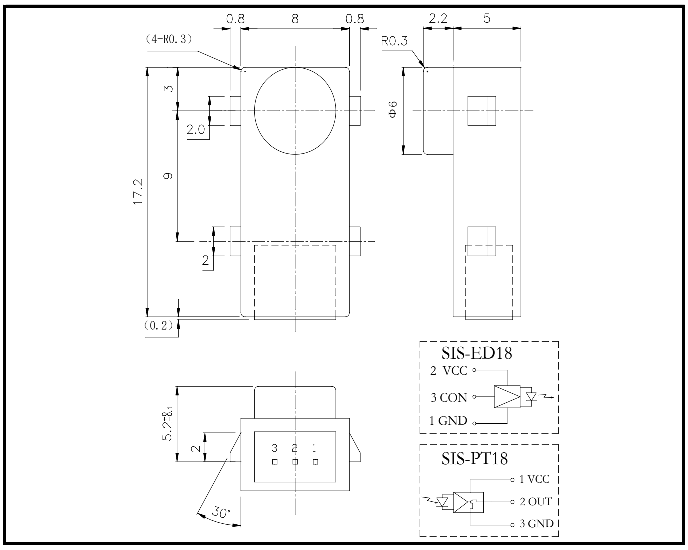
Relative threshold input current Vs. Moving distance



SIS-ED18 & SIS-PT18
Photo Interrupter

DIMENSIONS

Unit:mm



A modulative emitting diode and a modulative detecting photo IC with connector has been put ineach package. The use of the emitter and detector as a pair enables it to work as a penetrative type photo- sensor of approximately 100cm (Can be practically used as a reflective type sensor). Can be used as a paper sensor due to easy equipping and its high anti- dust factor.

Features

·Anti-visible rays due to visible ray cut resin for detector type

·Connector type(JAE IL-Y type)

·Dust proof

Applications

·ATM

·Auto stampers

·Card readers/writers

·Optical switches

MAXIMUM RATINGS

(Ta=25℃)

Item		Symbol	Ratings	Unit
Input	Supply voltage	V_{CC}	7	V
Output	Supply voltage	V_{CC}	13.2	V
	Low level output current	I_{OL}	30	mA
	Power dissipation	P_D	100	mW
Operating temperature *1		Topr.	-10～+60	°C
Storage tempertature *1		Tstg.	-20～+80	°C

*1. No icebound or dew

Elector-Optical Characteristics

(Ta=25℃)

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Emitter	Supply voltage	V_{CC}	-	4.75	-	5.25	V
	Current consumption	I_{CC}	V_{CC}=5V	-	15	30	uA
	Peak wavelength	λ_P	V_{CC}=5V	-	830	-	nm
	Half angle	$\Delta\theta$	-	-	±5	-	deg.
Detector	Supply voltage	V_{CC}	-	4.75	-	5.25	V
	Low level output voltage	V_{OL}	Vcc=5V, I_{OL}=16mA, Shading	-	-	0.4	V
	High level output voltage	V_{OH}	Vcc=5V, R_L=10kΩ,Non-Shading	4	-	-	V
	Current consumption	I_{CC}	Vcc=5V	-	5	10	mA
	Half angle	$\Delta\theta$		-	±5	-	deg.
Combination	Detecting distance	L	Vcc=5V	100	200	850	cm
	Hysteresis	I_{FHL}/I_{FLH}	Vcc=5V	-	0.9	-	-
	L→H propagation time	t_{PLH}	Vcc=5V, L=100cm, R_L=3.3kΩ	-	-	0.5	msec
	H→L propagation time	t_{PHL}	Vcc=5V, L=100cm, R_L=3.3kΩ	-	-	0.5	msec