

Dust-proof type

KI1232

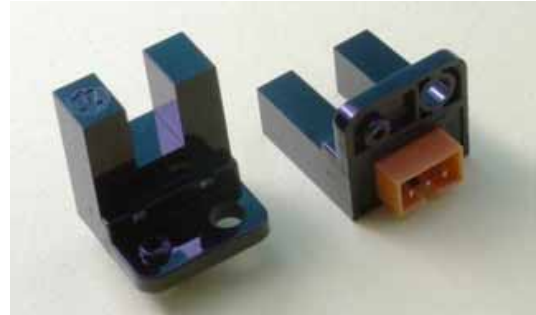
Photo Interrupter

Feature

- Special package to remove paper dust easily
- High performance with slit width 0.5mm
- Visible light cut filter installed
- Wide gap: 5.0mm

Application

- Object-passing
for Card reader, bill exchanger, ticket machine
- Coin-passing
for vending machine, amusement machine
- Paper detection for OA equipment



Emitter: Infrared LED

Detector: Photo transistor (Analog output)

Absolute Maximum Ratings

[Ta = 25 unless otherwise specified]

Parameter		Symbol	Value	Unit
Emitter	Supplied Voltage	V_{CC}	6	V
	Reverse Voltage	V_R	5	V
Detector	Collector-to-emitter Voltage	V_{CEO}	30	V
	Emitter-to-collector Voltage	V_{ECO}	5	V
	Collector Current	I_C	20	mA
	Collector power dissipation	P_C	75	V
Operating Temperature		T_{opr}	-25 ~ +75	
Storage Temperature		T_{stg}	-30 ~ +80	

Electro-optical Characteristics

[Ta = 25 unless otherwise specified]

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Emitter	Supplied Voltage	V_{CC}	4.5	5.0	5.5	V	
Detector	Dark Current	I_{CEO}	--	--	0.2	μA	$V_{CE}=10V$, 0 lux
Coupled	Light Current	I_C	0.3	--	--	mA	$V_{CE}=5V$
	Collector-Emitter Voltage	$V_{CE(sat)}$	--	--	0.4	V	$I_F=20mA$, $I_C=0.25mA$
Response	Rise Time	T_r	--	50	--	μs	$V_{CE}=5V$, $I_C=100 \mu A$ $R_L=1k\Omega$
	Fall Time	T_f	--	50	--		

The data is subject to change without notice.

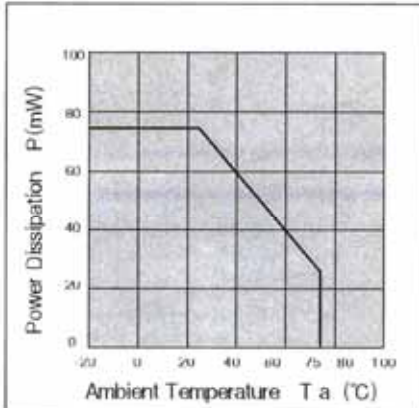
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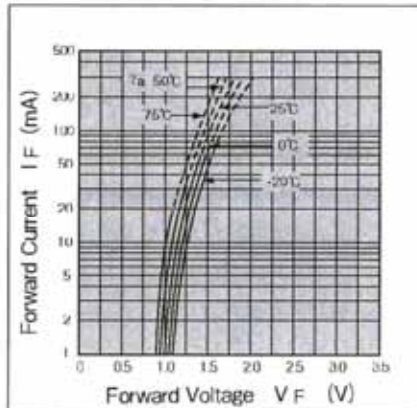
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Characteristics Graphs

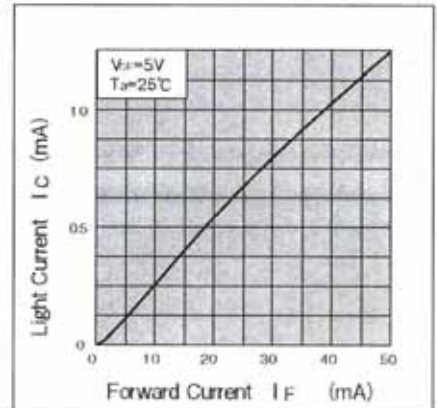
Collector Power Dissipation vs. Ambient Temperature



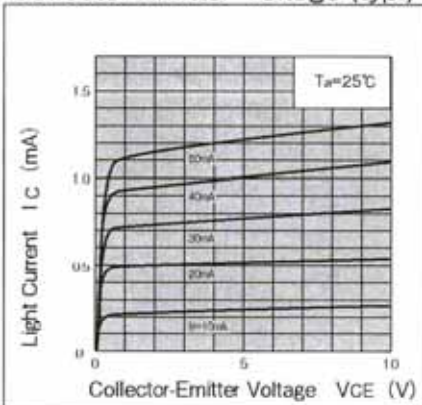
Forward Current vs. Forward Voltage (typ.)



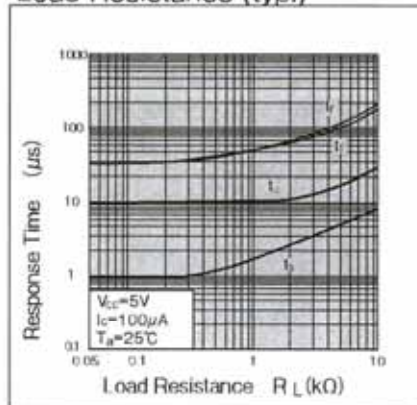
Light Current vs. Forward Current (typ.)



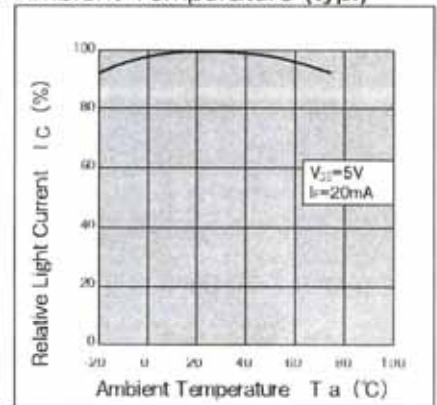
Light Current vs. Collector-Emitter Voltage (typ.)



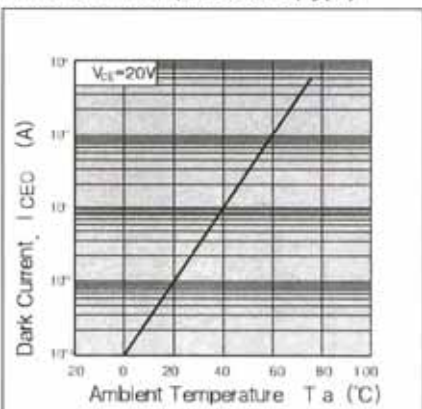
Response Time vs. Load Resistance (typ.)



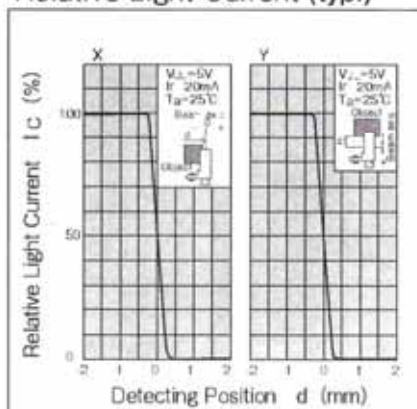
Relative Light Current vs. Ambient Temperature (typ.)



Dark Current vs. Ambient Temperature (typ.)



Detecting Position vs. Relative Light Current (typ.)

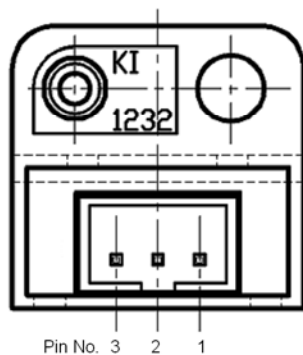
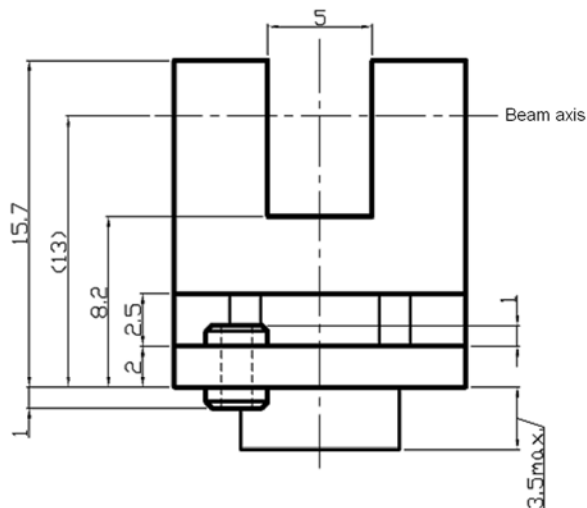
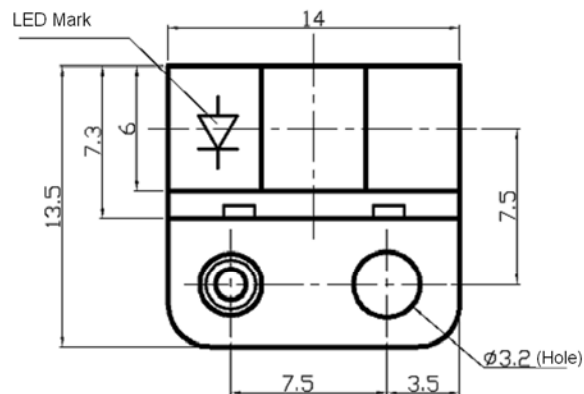


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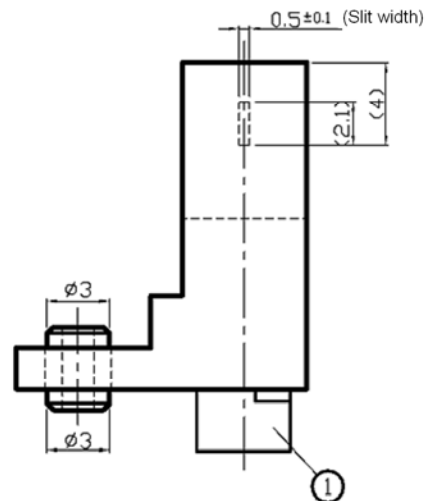
Drawing (unit: mm)



** Tolerance (unless otherwise specified)

Less than 5.0	± 0.2
5.0 ~ 15.0	± 0.3
More than 15.0	± 0.5

Value in () : for reference only



[Internal Connection]

