

Photo Interrupter

KI1232

Slit less Type

Description

Model **KI1232** consists of an Infra Red LED and a High sensitive Photo transistor (Analog output).

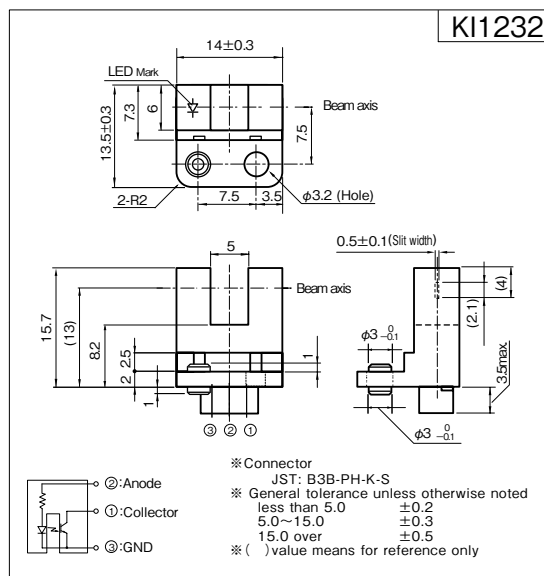
Feature

- Easy removing in paper-dust.
- High-resolution : slit width 0.5mm.
- Visible Light cut filter.

Application

- Object passing for Card reader, Bill exchanger.
- Coin-passing for Auto vending machine and Amusement.
- Object passing in Auto vender and Ticket vending machine.
- Paper detection for O.A. equipment.

Dimension (Unit:mm)



Absolute Maximum Ratings [Ta=25°C Unless otherwise noted]

Item		Symbol	Rating	Units
Emitter	Supply Voltage	V _{CC}	6	V
	Reverse Voltage	V _R	5	V
Detector	Collector-Emitter Voltage	V _{CEO}	30	V
	Emitter-Collector Voltage	V _{ECO}	5	V
	Collector Current	I _C	20	mA
	Power Dissipation	P _C	75	mW
Operating Temperature		T _{opr}	-20 ~ +75	°C
Storage Temperature		T _{stg}	-30 ~ +80	°C

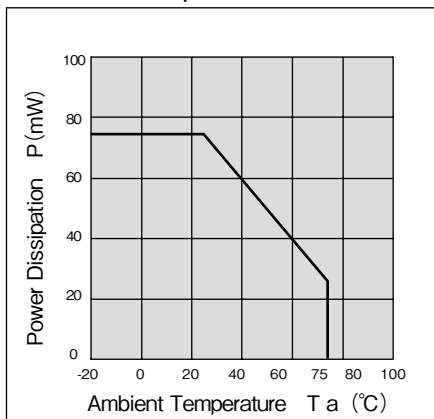
Electro-Optical Characteristics [Ta=25°C Unless otherwise noted]

Item		Symbol	Condition	min.	typ.	max.	Units
Emitter	Supply Voltage	V _{CC}		4.5	5.0	5.5	V
Detector	Dark Current	I _{CEO}	V _{CE} =10V, 0 lux	—	—	0.2	μ A
Coupled	Light Current	I _C	V _{CC} =5V	0.3	—	—	mA
	Collector-Emitter Voltage	V _{CE(sat)}	V _{CC} =5V, I _C =0.15mA	—	—	0.4	V
	Response Time	Rise	V _{CC} =5V, I _C =100 μ A, R _L =1k Ω	—	50	—	μ sec
		Fall		—	50	—	

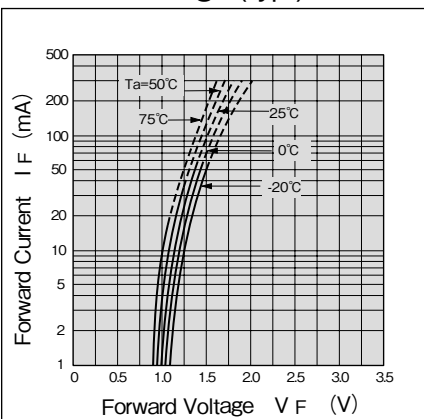
KI1232

Note: Operation never exceeds each value of Absolute Maximum Ratings.

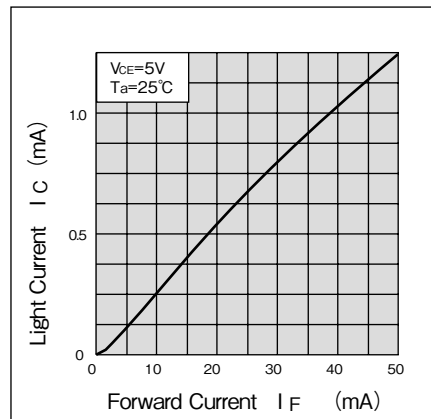
Collector Power Dissipation vs. Ambient Temperature



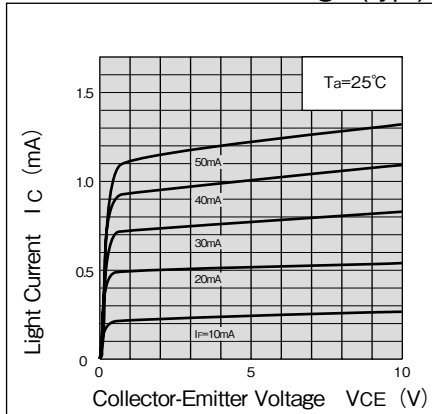
Forward Current vs. Forward Voltage (typ.)



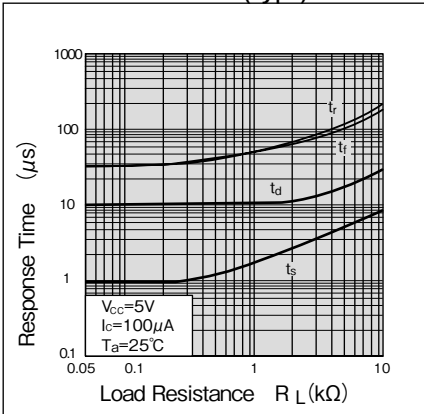
Light Current vs. Forward Current (typ.)



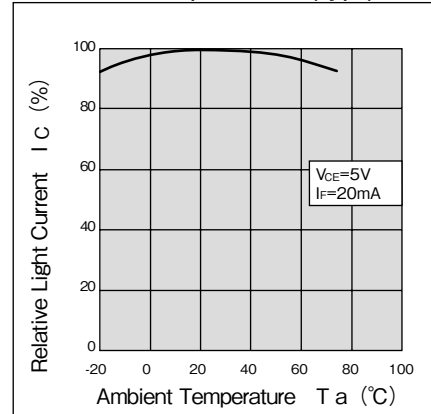
Light Current vs. Collector-Emitter Voltage (typ.)



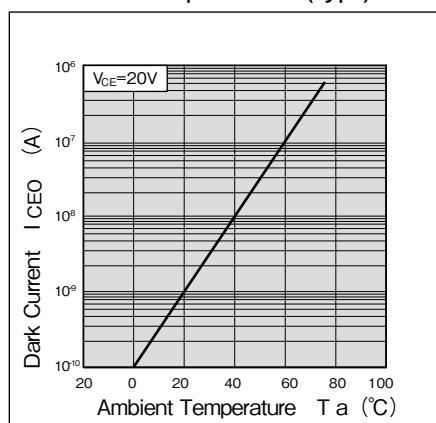
Response Time vs. Load Resistance (typ.)



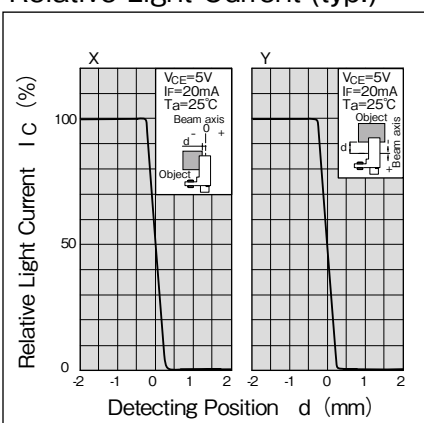
Relative Light Current vs. Ambient Temperature (typ.)



Dark Current vs. Ambient Temperature (typ.)



Detecting Position vs. Relative Light Current (typ.)



- A Custom designed package is available on request.
- Specification are subject to change without notice.

06.10-1A

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