

KR1219

Red LED type

Description

Model **KR1219** has a transfer mold package with clear resin. 660nm LED can make your optical design unique.

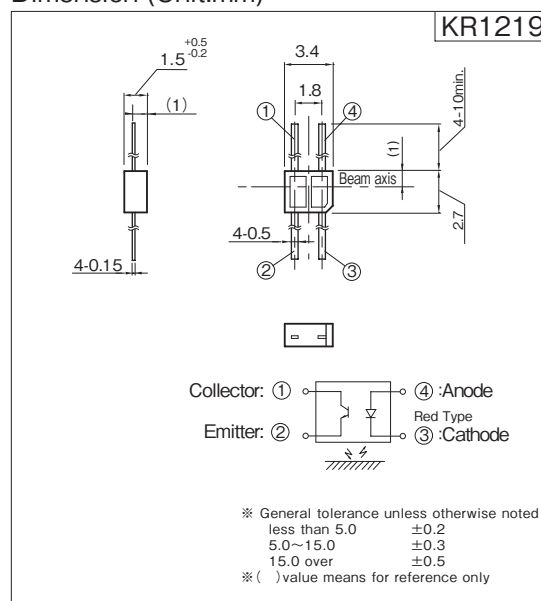
Feature

- Compact Package.
- Detection of Infrared transmissive object.
- Installed on PC board.

Application

- Mark sensor of Thermal paper.
- Paper absence Copying machine, Printer, and Facsimile.
- Paper detection/Size detection in Copying machine and Facsimile.
- Mark sensor of OMR and OCR.
- Scanning for Color-discrimination and Pattern.

Dimension (Unit:mm)



Absolute Maximum Ratings

[Ta=25°C Unless otherwise noted]

Item	Symbol	Rating	Units
Emitter	Forward Current	I _F	30 mA
	Reverse Voltage	V _R	5 V
	Power Dissipation	P	75 mW
Detector	Collector-Emitter Voltage	V _{CEO}	20 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 ~ +80	°C
Storage Temperature	T _{stg}	-30 ~ +85	°C
Soldering Temperature ^{※1}	T _{sol}	260	°C

- ※ 1. Soldering condition: Max.5 sec. at 2mm from housing
- ※ 2. Specific wavelength is available.
- ※ 3. 90% Reflective paper, d=1mm
- ※ 4. No Object, in Dark

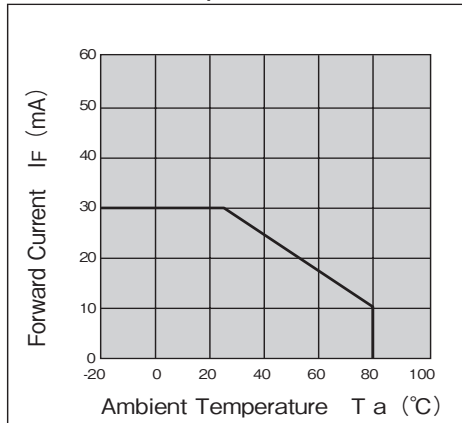
Electro-Optical Characteristics [Ta=25°C Unless otherwise noted]

Item	Symbol	Condition	min.	typ.	max.	Units
Emitter	Forward Voltage	I _F =20mA	—	1.7	2.3	V
	Reverse Current	V _R =5V	—	—	10	μ A
	Peak Wavelength ^{※2}	I _F =20mA	—	660	—	nm
Detector	Dark Current	V _{CE} =20V, 0 lux	—	1	200	n A
Coupled	Light Current ^{※3}	V _{CE} =5V, I _F =10mA	200	—	2000	μ A
	Leak Current ^{※4}	V _{CE} =5V, I _F =10mA	—	—	20	μ A
	Response Time	V _{CC} =5V, I _C =400 μ A, R _L =1K Ω , d=1mm	—	24	—	μ sec
			—	24	—	μ sec

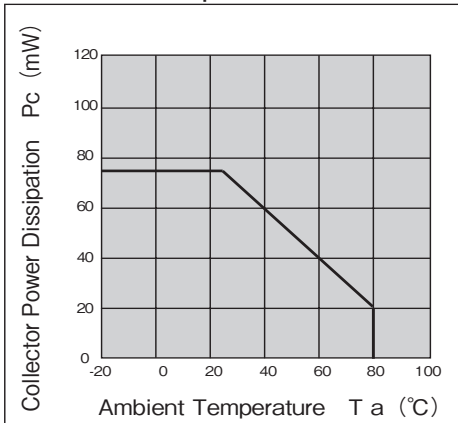
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Note: Operation never exceeds each value of Absolute Maximum Ratings.

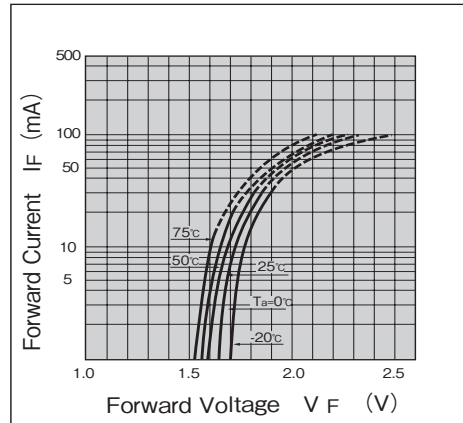
Forward Current vs. Ambient Temperature



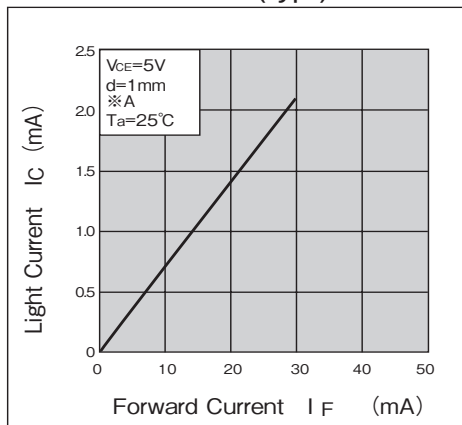
Collector Power Dissipation vs. Ambient Temperature



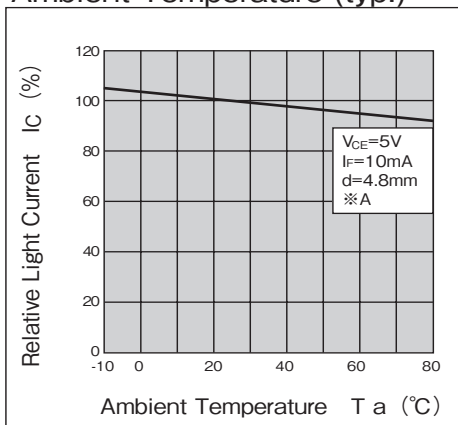
Forward Current vs. Forward Voltage (typ.)



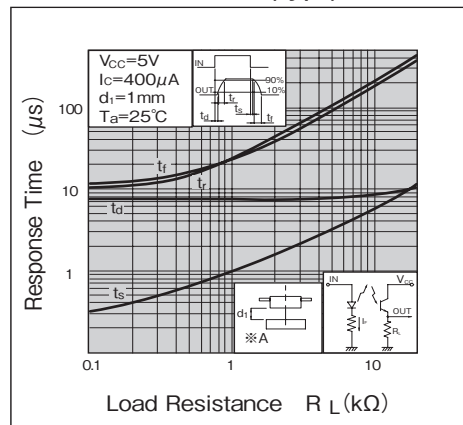
Light Current vs. Forward Current (typ.)



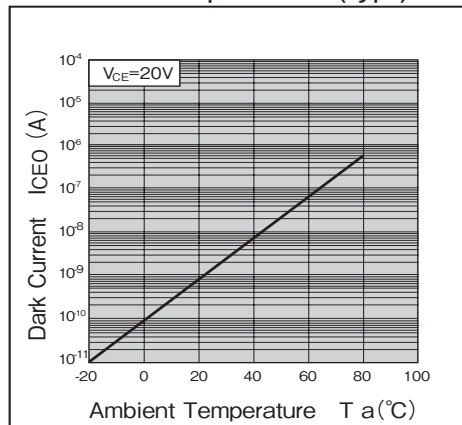
Relative Light Current vs. Ambient Temperature (typ.)



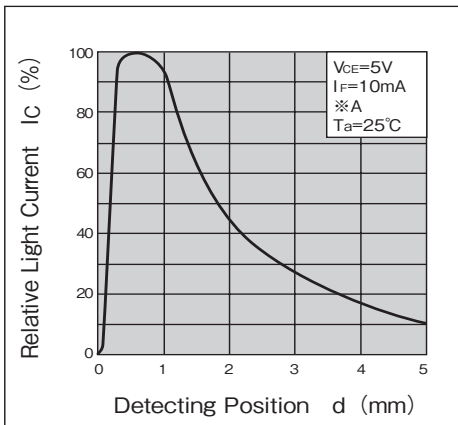
Response Time vs. Load Resistance (typ.)



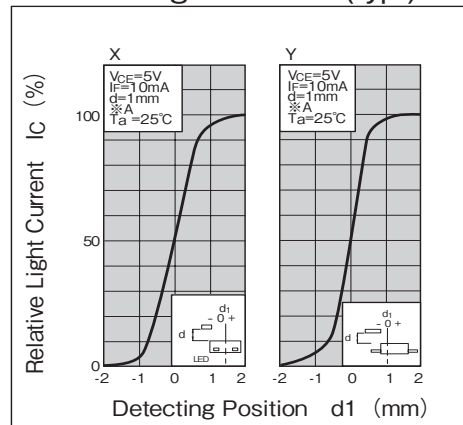
Dark Current vs. Ambient Temperature (typ.)



Detecting Position vs. Relative Light Current (typ.)



Detecting Position vs. Relative Light Current (typ.)



※A 90% Reflective Paper

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

05.03-2A

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