

KD1299

Description

Model **KD1299** is silicon photodiode mounted in TO-18 type header with epoxy encapsulation.

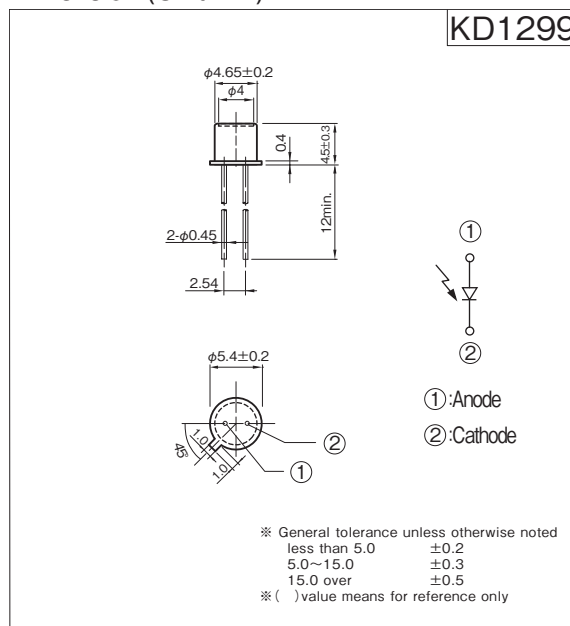
Feature

- Photo diode. (λ p:900nm)
- TO-18 package.

Application

- Photo acceptance unit for Photo sensor.
- Optical Switch.

Dimension (Unit:mm)



Absolute Maximum Ratings

[Ta=25°C Unless otherwise noted]

Item	Symbol	Rating	Units
Reverse Voltage	V_R	30	V
Power Dissipation	P_D	100	mW
Operating Temperature	T_{opr}	-25 ~ +125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C
Soldering Temperature ^{※1}	T_{sol}	260	°C

- ※ 1. Soldering condition 5sec. At 2.6mm over from TO-18 header.
※ 2. Ev : CIE STD. A Light source

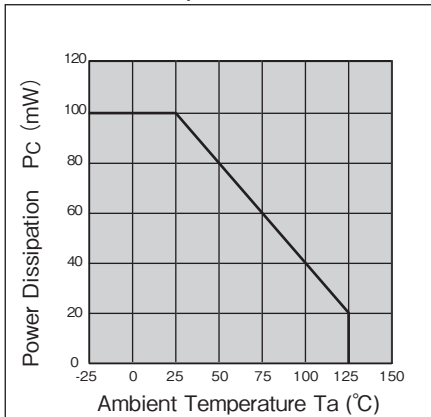
Electro-Optical Characteristics [Ta=25°C Unless otherwise noted]

Item	Symbol	Condition	min.	typ.	max.	Units
Dark Current	I_D	$V_R=10V$, $E_v=0$ lux ^{※2}	—	—	10	nA
Short Circuit Current	I_{SC}	$E_v=100$ lux ^{※2}	0.3	0.6	—	μA
Peak Wavelength Spectral	λ_p		—	900	—	nm
Half Angle	$\Delta \theta$		—	45	—	deg
Response Time	Rise	$V_{CC}=5V$, $R_L=1k \Omega$	—	2.5	—	μsec
	Fall		—	2	—	

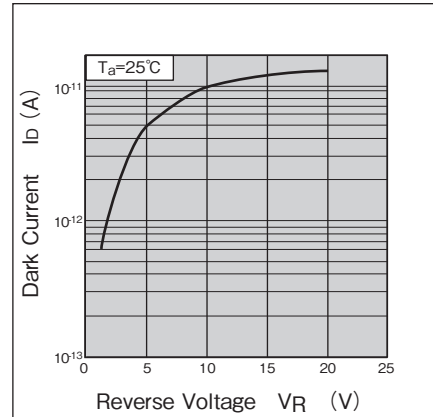
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Note: Operation never exceeds each value of Absolute Maximum Ratings.

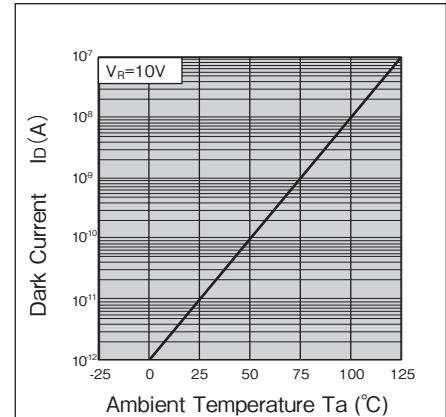
Power Dissipation vs.
Ambient Temperature



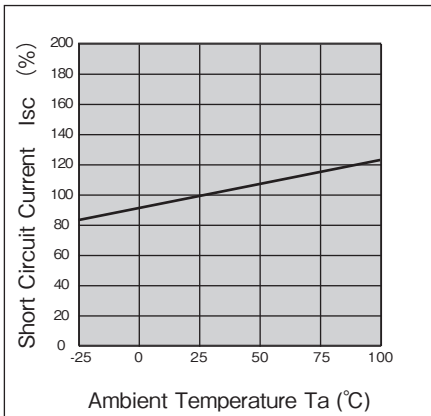
Dark Current vs.
Reverse Voltage (typ.)



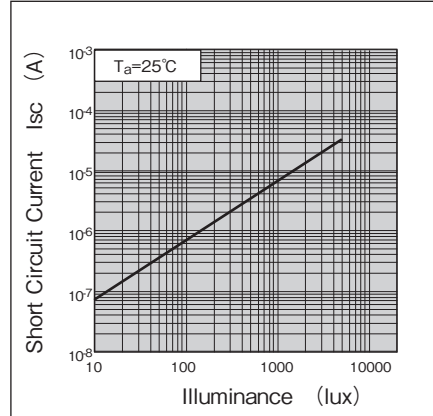
Dark Current vs.
Ambient Temperature (typ.)



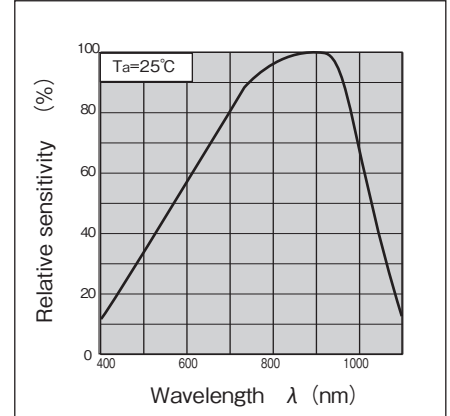
Short Circuit Current vs.
Ambient Temperature (typ.)



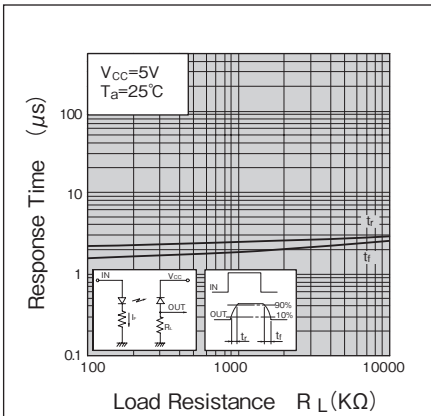
Short Circuit Current vs.
Illuminance (typ.)



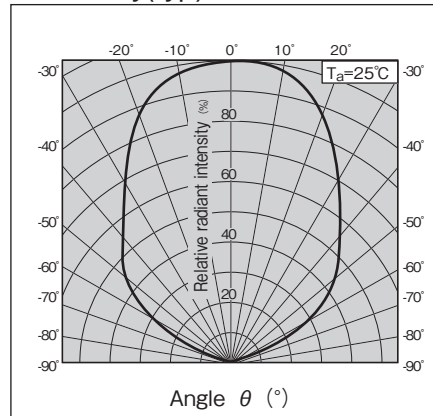
Spectral Sensitivity (typ.)



Response Time vs.
Load Resistance (typ.)



Directivity (typ.)



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

04.09-1A

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