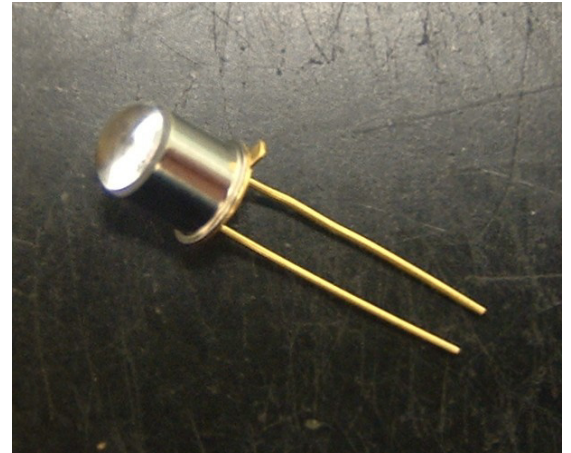


General Description

The OSP-1KL is a silicon photodiode mounted in durable, hermetically sealed TO-18 metal can package, provides years of reliable performance, even under demanding conditions such as use outdoors.

Features

- Narrow angular response
- Durable
- High reliability in demanding environments
- Meet RoHS



Applications

- Optical counters
- Optical detector
- Infrared sensors
- Encoders
- Smoke detectors

MAXIMUM RATINGS

(Ta=25°C)

Item	Symbol	Rating	Unit
Maximum reverse voltage	V _{RM}	20	V
Operating temperature.	T _{opr}	-25 ~ +120	°C
Storage temperature.	T _{stg}	-50 ~ +150	°C
Soldering temperature. *1	T _{sol}	260	°C

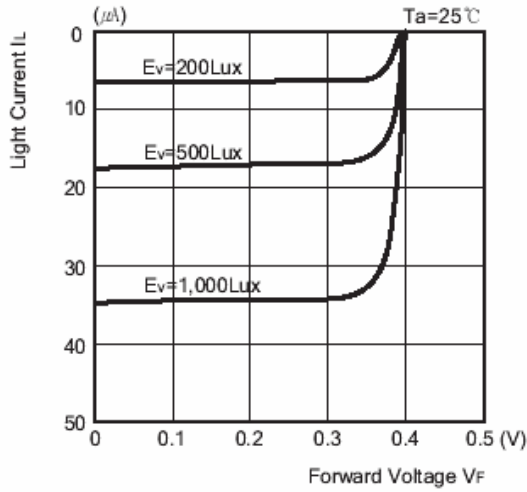
* 1 For MAX. 5 seconds at the position of 5mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

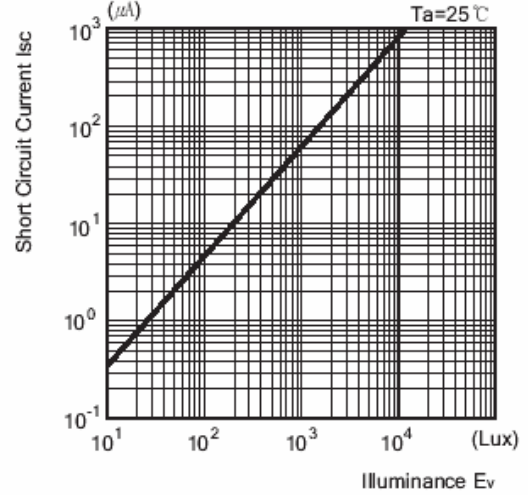
(Ta=25°C)

Item	Symbol	Condition	Min	Typ	Max	Unit
Dark current	I _d	V _{cc} = 5V			0.1	uA
Open circuit voltage	V _{oc}	E _v = 1000 Lux *2		0.4		V
Short circuit current	I _{sc}		18	35		uA
Curve Factor	C.F.		0.55			-
Capacitance	C _t	V = 0V, f = 1MHz		50		pF
Total capacitance of V _{oc}	α t			-2.2		% / °C
Total capacitance of I _{sc}	β t			0.18		% / °C
Spectral Sensitivity	λ			450 ~ 1050		nm
Peak sensitive wavelength	λ _p			900		nm
Half angle	Δ θ			±15		deg.

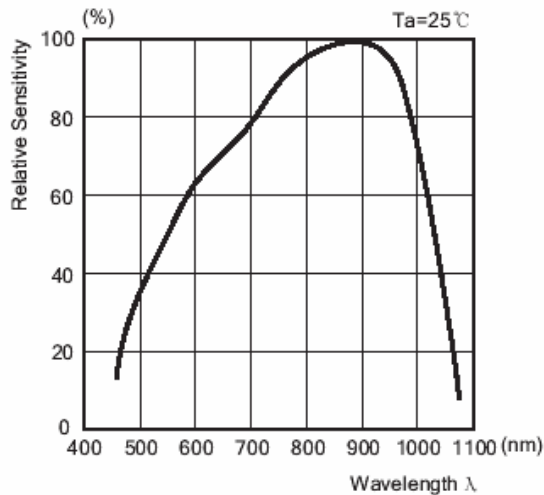
● Light Current / Forward Voltage I_L/V_F



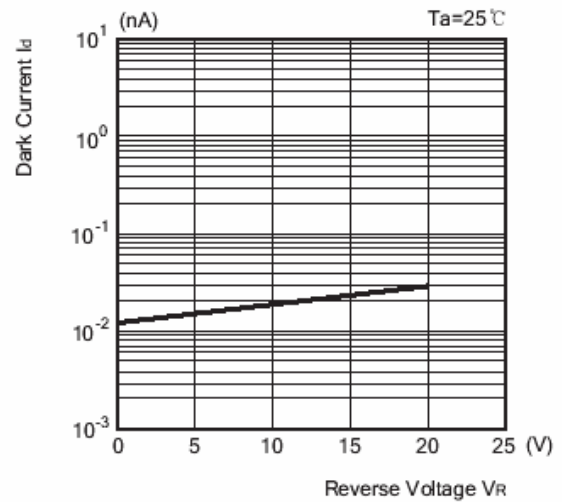
● Short Circuit Current / Illuminance I_{sc}/E_v



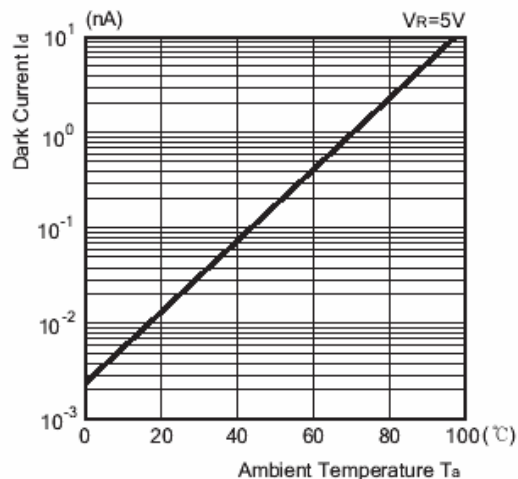
● Spectral Sensitivity



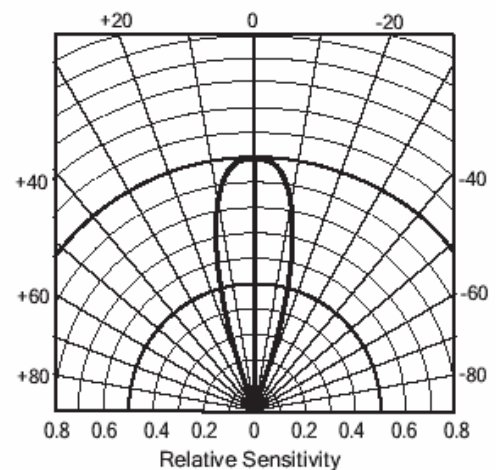
● Dark Current / Reverse Voltage I_d/V_R



● Dark Current / Ambient Temperature I_d/T_a



● Directive Characteristics



■ DIMENSIONS

(Unit: mm)

