

Si Photodiode

KPD101M31

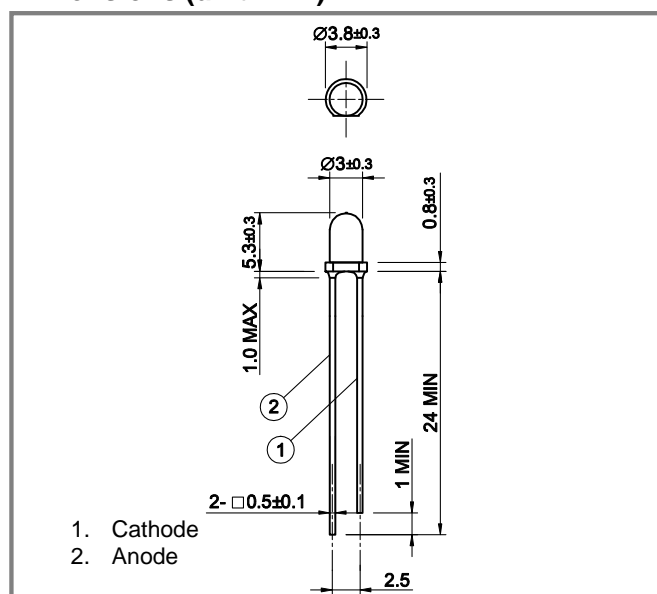
Features

- Transparent epoxy mold
- High sensitivity

Applications

- Optical switches
- Optical encoders
- Pulse detectors
- Sensors and industrial controls

Dimensions (unit: mm)



Absolute Maximum Ratings

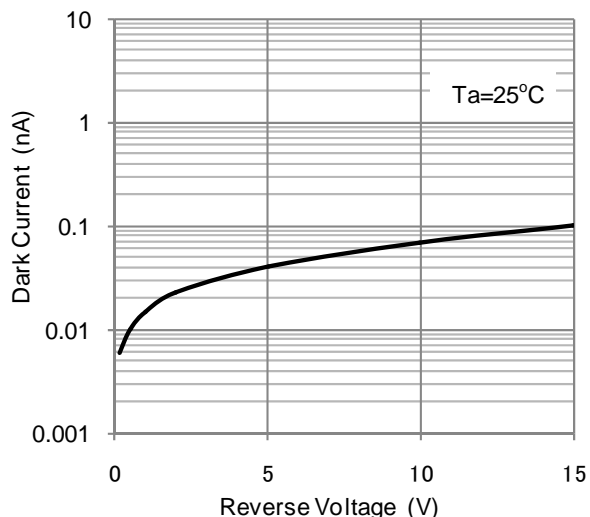
Parameter	Symbol	Value	Unit	Note
Reverse voltage	V_R	10	V	
Reverse current	I_R	1	mA	
Forward current	I_F	10	mA	
Operating temperature	T_{opr}	-20 to +80	°C	Avoid dew condensation
Storage temperature	T_{stg}	-20 to +100	°C	Avoid dew condensation
Soldering Temperature	T_{sol}	260	°C	5sec max

Electrical and Optical Characteristics ($T_a=25\text{ }^\circ\text{C}$ unless otherwise noted)

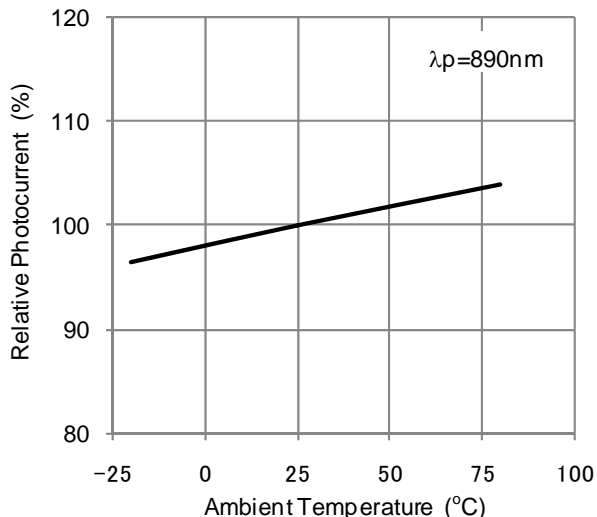
Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Active area	S	0.81 x 0.81			mm ²	
Operating voltage	V_{opr}	-	-	5	V	
Sensitive wavelength	λ	400	850(λ_p)	1000	nm	λ_p =Peak wavelength
Open circuit voltage	V_{op}	-	400	-	mV	1000lx @2856K
Short circuit current	I_{sh}	-	30	-	μA	1000lx @2856K
Dark current	I_D	-	-	10	nA	$V_R=5\text{V}$
Terminal capacitance	C_t	-	21	-	pF	$V_R=5\text{V}$, $f=1\text{MHz}$
Half angle	2θ	-	60	-	deg	

Specifications are subject to change without notice.

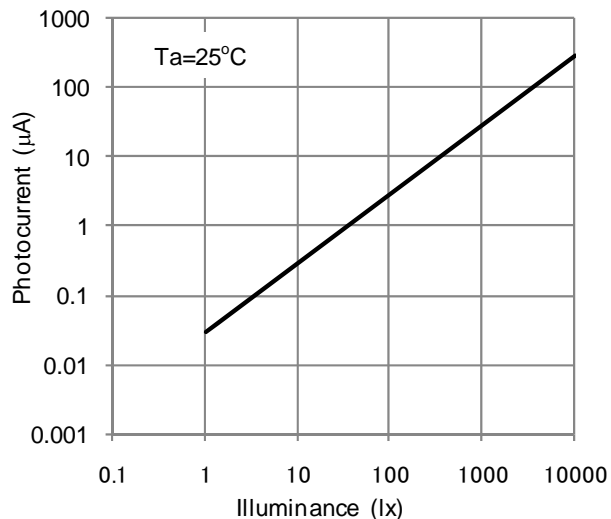
Dark Current - Reverse Voltage



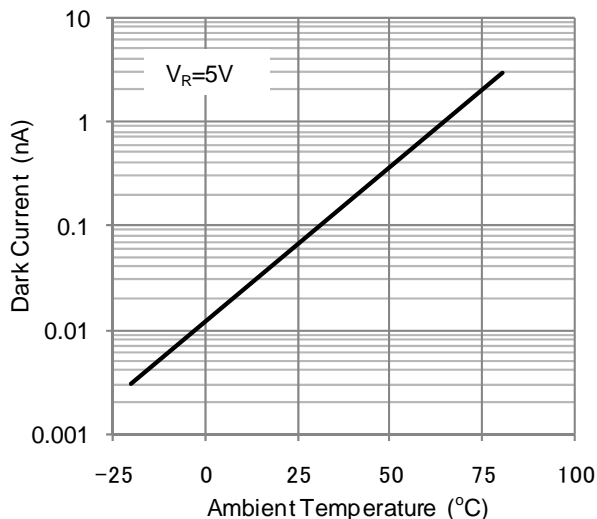
Photocurrent - Ambient Temperature



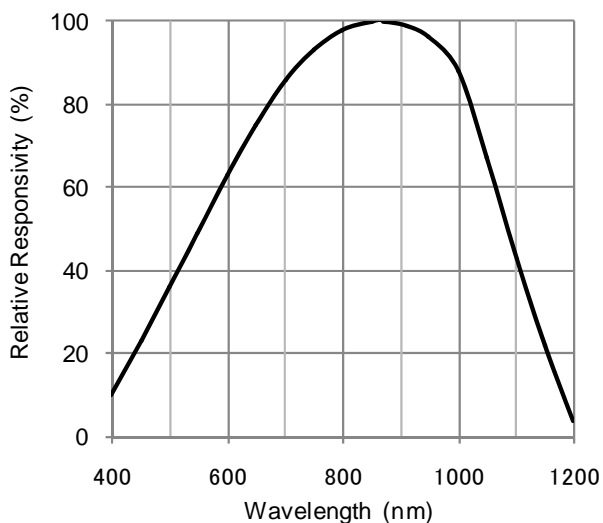
Photocurrent - Illuminance



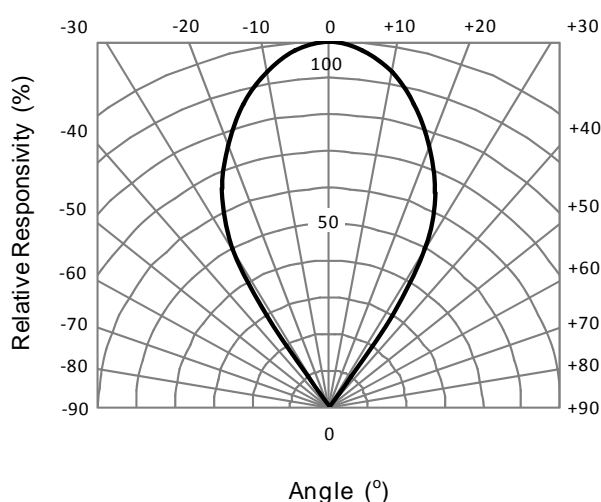
Dark Current - Ambient Temperature



Spectral Responsivity



Directivity



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Contacts:

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