

Si Photodiode

KPD1803H

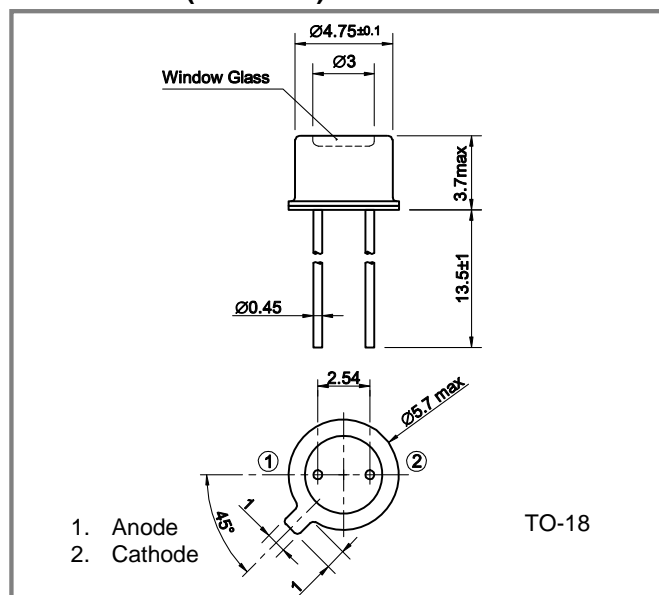
Features

- Hermetic seal type for high reliability uses
- Flat-glass window

Applications

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

Dimensions (unit: mm)



Absolute Maximum Ratings

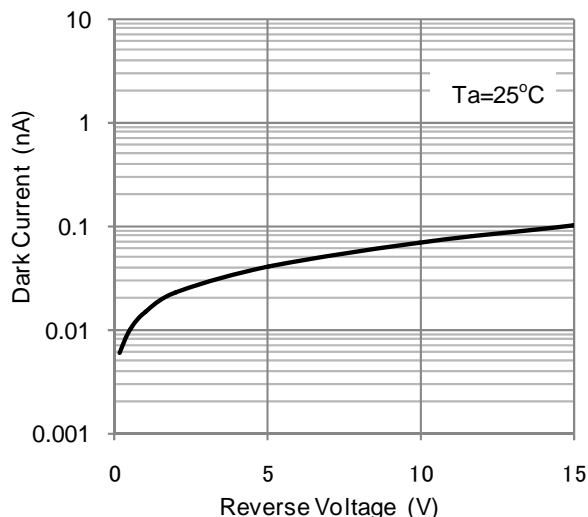
Parameter	Symbol	Value	Unit	Note
Reverse voltage	V_R	10	V	
Reverse current	I_R	500	μA	
Forward current	I_F	10	mA	
Operating temperature	T_{opr}	-40 to +125	$^{\circ}C$	Avoid dew condensation
Storage temperature	T_{stg}	-55 to +125	$^{\circ}C$	Avoid dew condensation

Electrical and Optical Characteristics (Ta=25 °C unless otherwise noted)

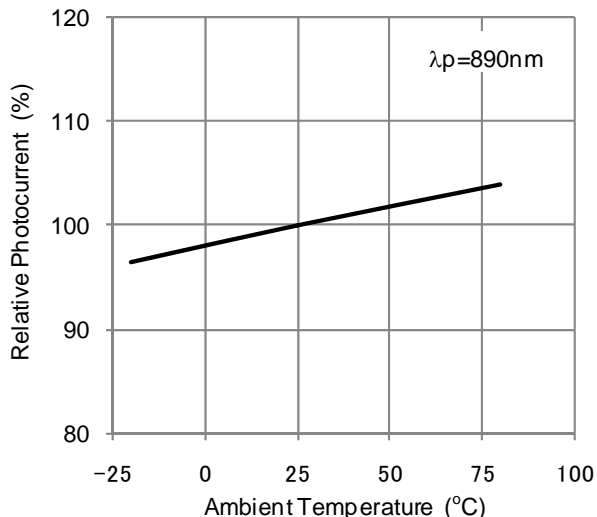
Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Active area	S	1.5 x 1.8			mm^2	
Operating voltage	V_{opr}	-	-	5	V	
Sensitive wavelength	λ	400	840(λ_p)	1000	nm	λ_p =Peak wavelength
Open circuit voltage	V_{op}	-	450	-	mV	1000lx @2856K
Short circuit current	I_{sh}	-	17	-	μA	1000lx @2856K
Dark current	I_D	-	-	1	nA	$V_R=5V$
Terminal capacitance	C_t	-	250	-	pF	$V_R=0V, f=1MHz$

Specifications are subject to change without notice.

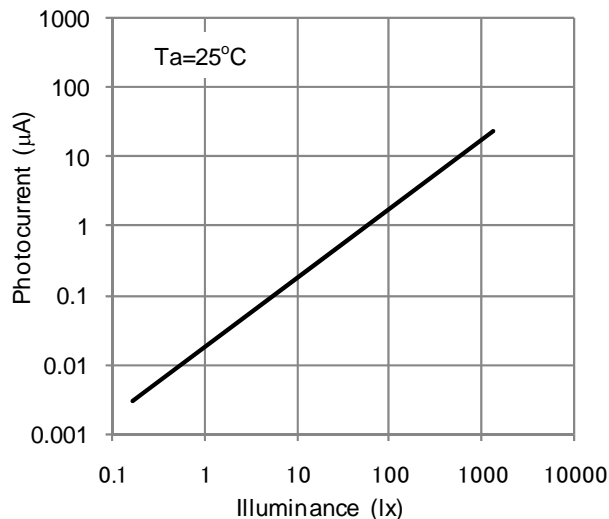
Dark Current - Reverse Voltage



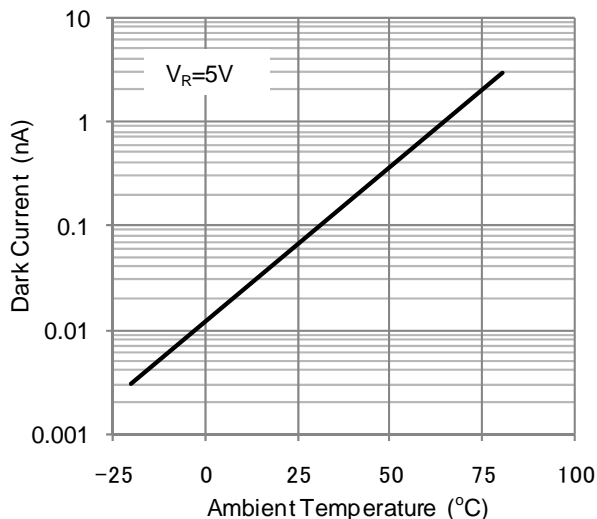
Photocurrent - Ambient Temperature



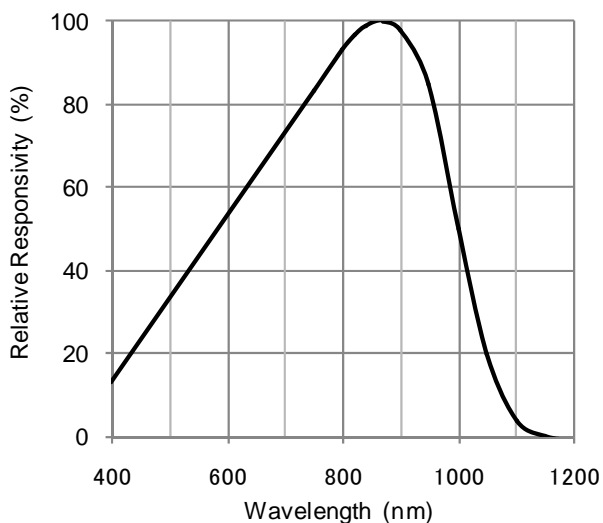
Photocurrent - Illuminance



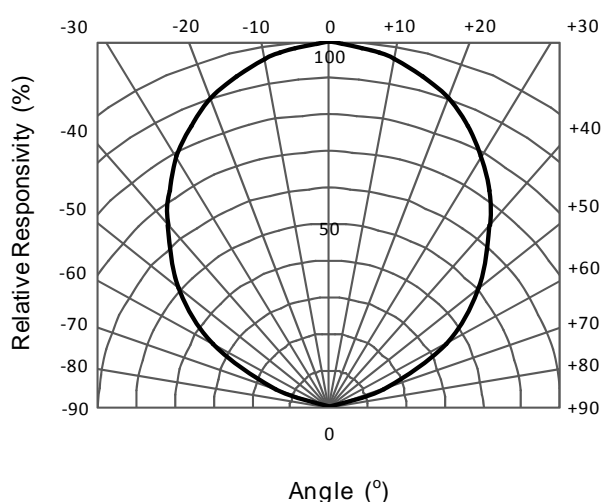
Dark Current - Ambient Temperature



Spectral Responsivity



Directivity



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Contacts:

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