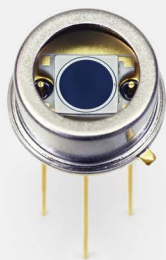


Si PIN photodiode

S17348



Si PIN photodiode for visible to infrared photometry

The S17348 is a Si PIN photodiode developed for YAG lasers (1060 nm). High photosensitivity of 0.37 A/W at 1060 nm and high-speed response of 120 MHz are realized.

Features

- High sensitivity in infrared region: 0.37 A/W ($\lambda=1060$ nm)
- High-speed response: $f_c=120$ MHz ($V_R=100$ V)
- Low capacitance: $C_t=6.5$ pF ($V_R=100$ V)
- Large photosensitive area: $\phi 3$ mm
- High reliability: TO-5 metal package

Applications

- Fiber laser detection
- YAG laser detection
- Analytical instrument, etc.

Structure

Parameter	Symbol	Specification	Unit
Photosensitive area	-	$\phi 3$	mm
Package	-	TO-5	-
Window material	-	Borosilicate glass	-

Absolute maximum ratings ($T_a=25$ °C)

Parameter	Symbol	Condition	Value	Unit
Reverse voltage	V_R		150	V
Operating temperature	T_{opr}	No dew condensation*1	-40 to +100	°C
Storage temperature	T_{stg}	No dew condensation*1	-55 to +125	°C

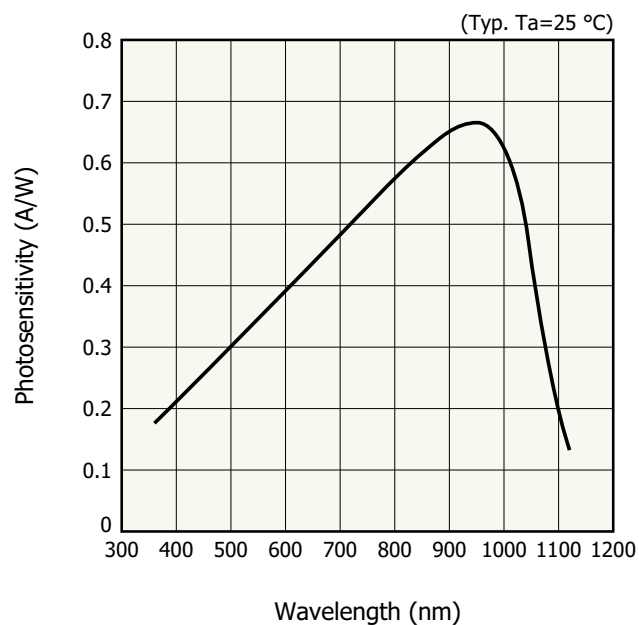
*1: When there is a temperature difference between a product and the surrounding area in high humidity environments, dew condensation may occur on the product surface. Dew condensation on the product may cause deterioration in characteristics and reliability.

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

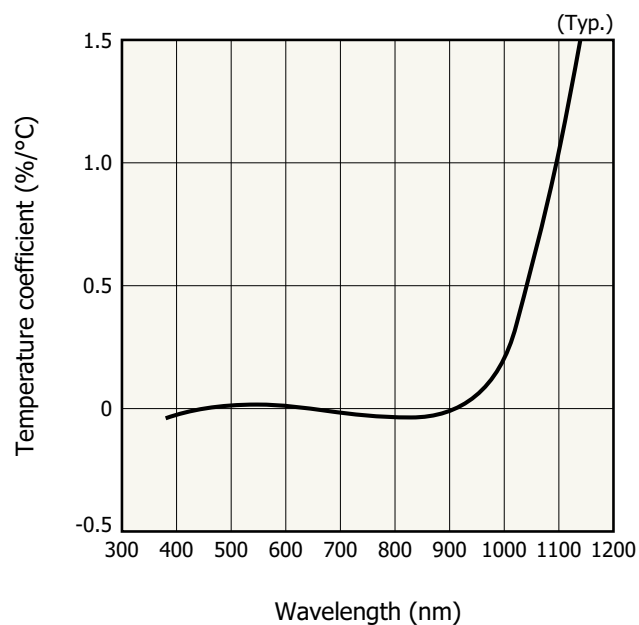
Electrical and optical characteristics ($T_a=25$ °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	360 to 1120	-	nm
Peak sensitivity wavelength	λ_p		-	940	-	nm
Photosensitivity	S	$\lambda=1060$ nm	0.32	0.37	-	A/W
Short circuit current	I_{sc}	2856 K, 100 lx	6.9	7.6	-	μ A
Dark current	I_D	$V_R=100$ V	-	0.3	10	nA
Cutoff frequency	f_c	$V_R=100$ V, $R_L=50$ Ω $\lambda=1060$ nm	-	120	-	MHz
Terminal capacitance	C_t	$V_R=100$ V, $f=10$ kHz	-	6.5	-	pF

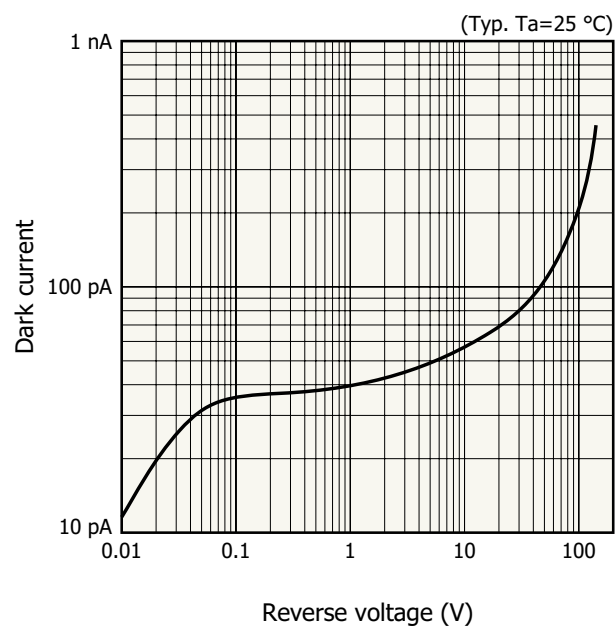
Spectral response



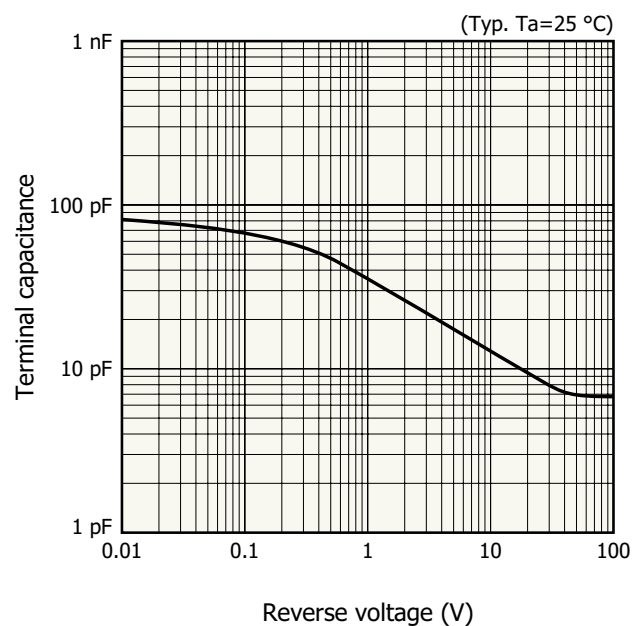
Sensitivity temperature characteristics



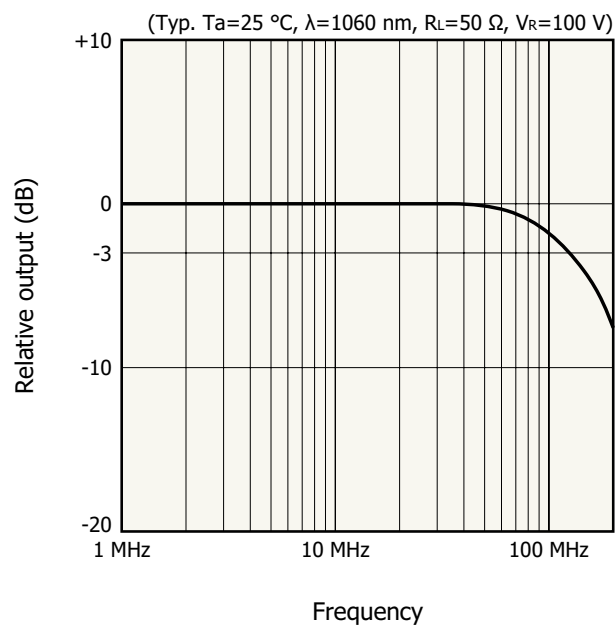
Dark current vs. reverse voltage



Terminal capacitance vs. reverse voltage

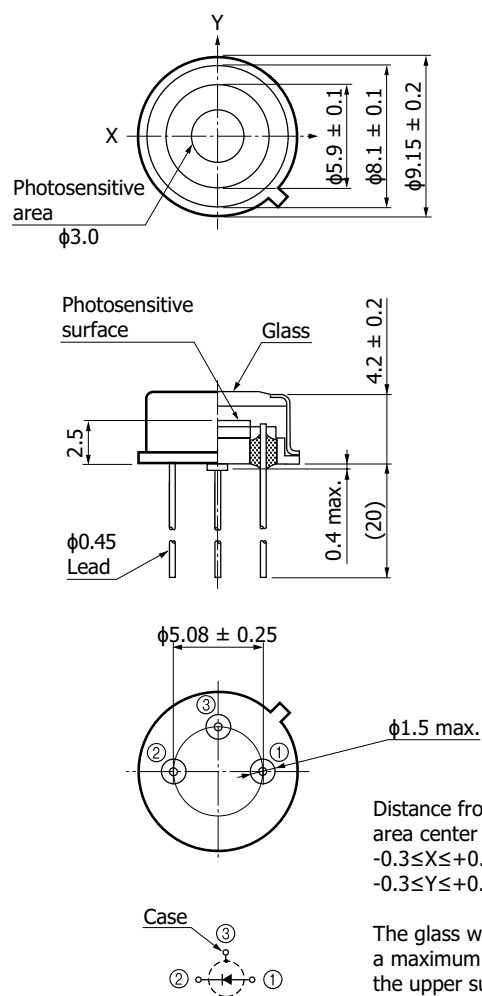


Frequency characteristics



KPINB0475EA

Dimensional outline (unit: mm)



KPINA0131EA

Recommended soldering condition

- Solder temperature: 260 $^{\circ}\text{C}$ max. (10 s or less, once)

Note: When you set soldering conditions, check that problems do not occur in the product by testing out the conditions in advance.

 Related information

www.hamamatsu.com/sp/ssd/doc_en.html

■ Precautions

- Notice
- Precautions / Metal, ceramic, plastic package products

■ Catalogs

- Technical note / Si photodiodes

Information described in this material is current as of June 2026.

Product specifications are subject to change without prior notice due to improvements or other reasons. This document has been carefully prepared and the information contained is believed to be accurate. In rare cases, however, there may be inaccuracies such as text errors. Before using these products, always contact us for the delivery specification sheet to check the latest specifications.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use. Copying or reprinting the contents described in this material in whole or in part is prohibited without our prior permission.