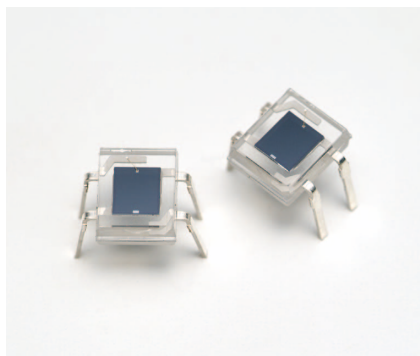


# Si PIN photodiode

S4707-01



## Si PIN photodiode for general photometry

### Features

- Clear plastic package: 4.5 × 5.5 mm
- 4-pin DIP type
- Active area: 2.4 × 2.8 mm

### Applications

- Optical switch, etc.

### Absolute maximum ratings (Ta=25 °C)

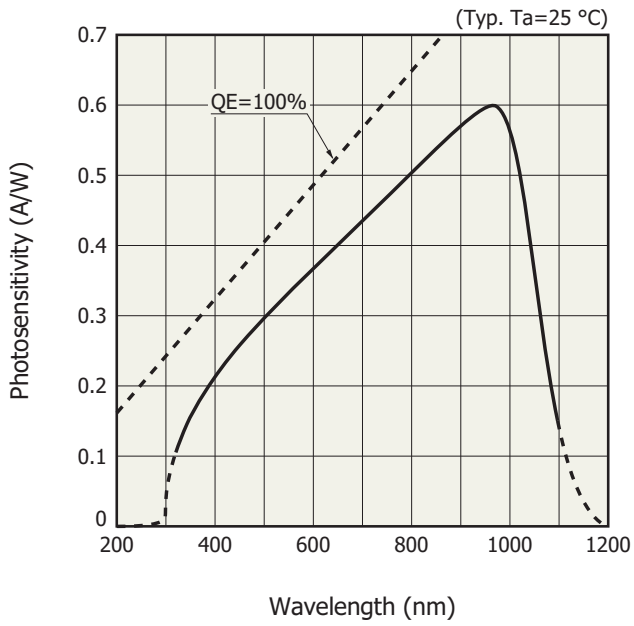
Parameter	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub> max	20	V
Operating temperature	T <sub>opr</sub>	-25 to +85	°C
Storage temperature	T <sub>stg</sub>	-40 to +100	°C

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.

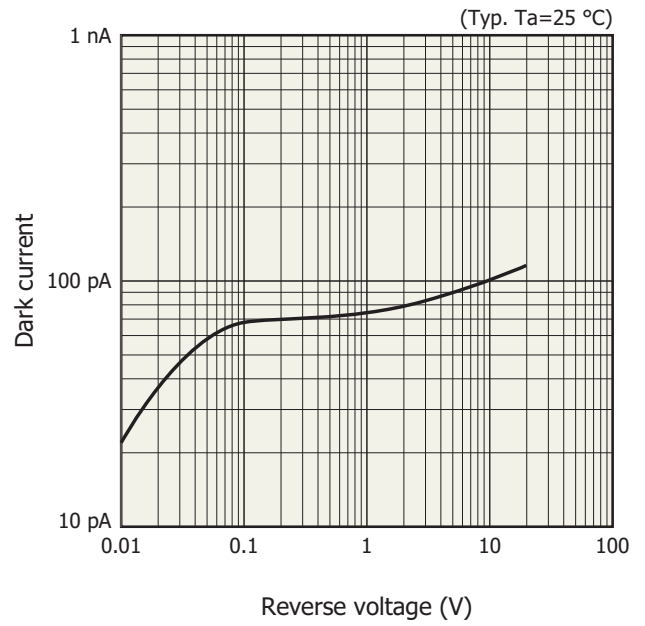
### Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	$\lambda$		-	320 to 1100	-	nm
Peak sensitivity wavelength	$\lambda_p$		-	960	-	nm
Photosensitivity	S	$\lambda = \lambda_p$	0.5	0.6	-	A/W
Short circuit current	I <sub>sc</sub>	100 lx, 2856 K	-	6.6	-	μA
Dark current	I <sub>D</sub>	V <sub>R</sub> =10 V	-	0.08	5	nA
Cutoff frequency	f <sub>c</sub>	V <sub>R</sub> =10 V, R <sub>L</sub> =50 Ω -3 dB, $\lambda$ =780 nm	-	20	-	MHz
Terminal capacitance	C <sub>t</sub>	V <sub>R</sub> =10 V, f=1 MHz	-	14	30	pF

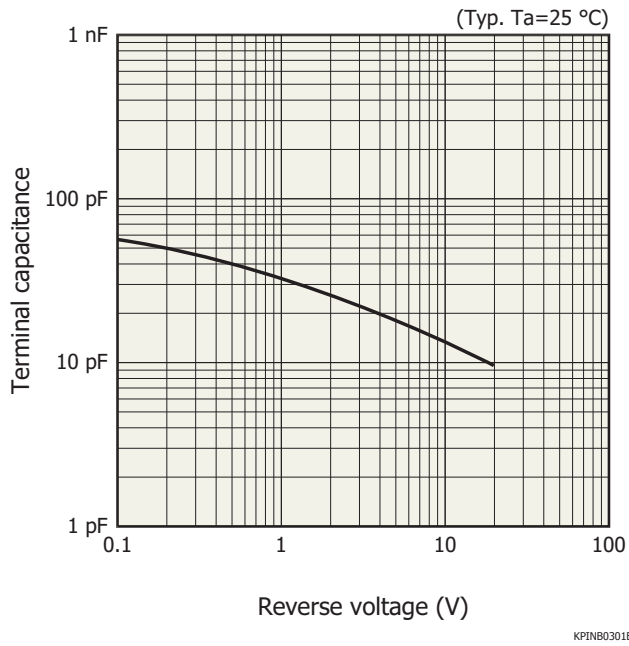
**Spectral response**



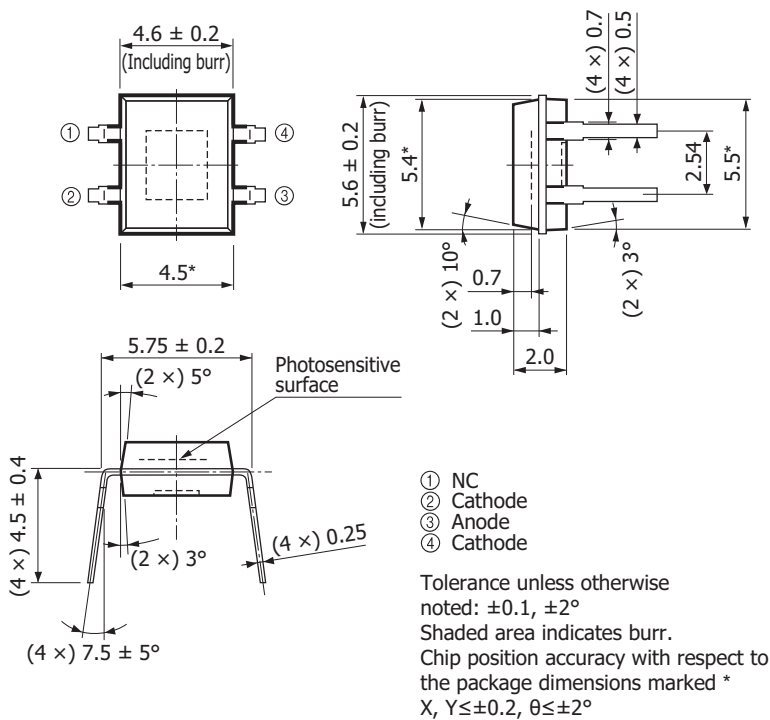
**Dark current vs. reverse voltage**



**Terminal capacitance vs. reverse voltage**



### Dimensional outline (unit: mm)



KPIN0099EB

### Related information

[www.hamamatsu.com/sp/ssd/doc\\_en.html](http://www.hamamatsu.com/sp/ssd/doc_en.html)

#### Precautions

- Disclaimer
- Metal, ceramic, plastic package products

#### Technical information

- Si photodiode/Application circuit examples

Information described in this material is current as of October 2017.

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.

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