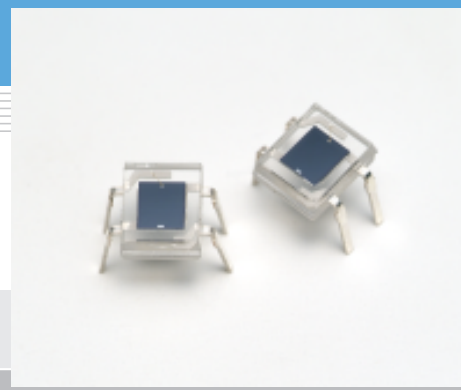


# Si PIN photodiode

## 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.

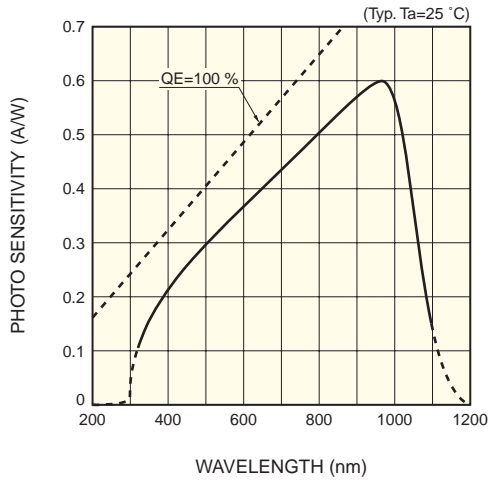
### ■ Absolute maximum ratings (Ta=25 °C)

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

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

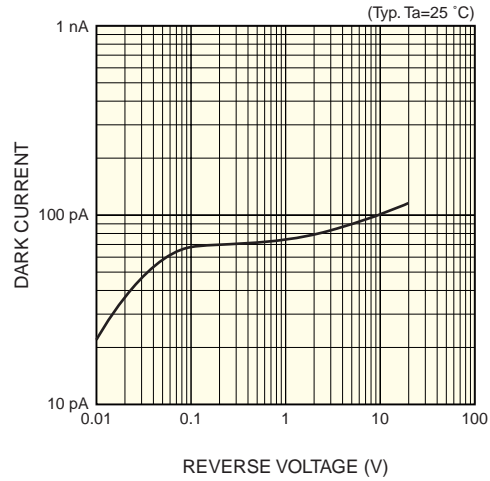
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	$\lambda$		-	320 to 1100	-	nm
Peak sensitivity wavelength	$\lambda_p$		-	960	-	nm
Photo sensitivity	S	$\lambda = \lambda_p$	0.5	0.6	-	A/W
Short circuit current	I <sub>sc</sub>	100 lx, 2856 K	-	6.6	-	μA
Dark current	I <sub>d</sub>	V <sub>R</sub> =10 V	-	0.08	5	nA
Cut-off 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



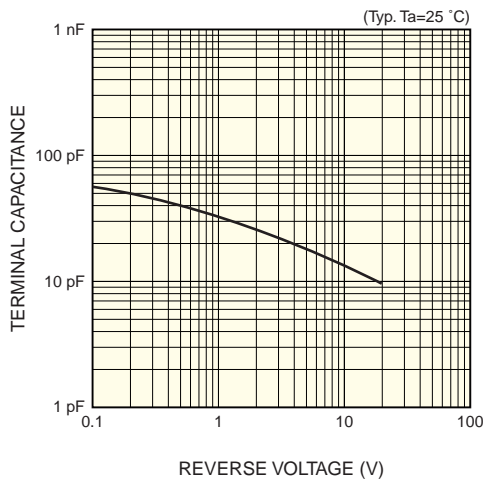
KPINB0299EA

■ Dark current vs. reverse voltage



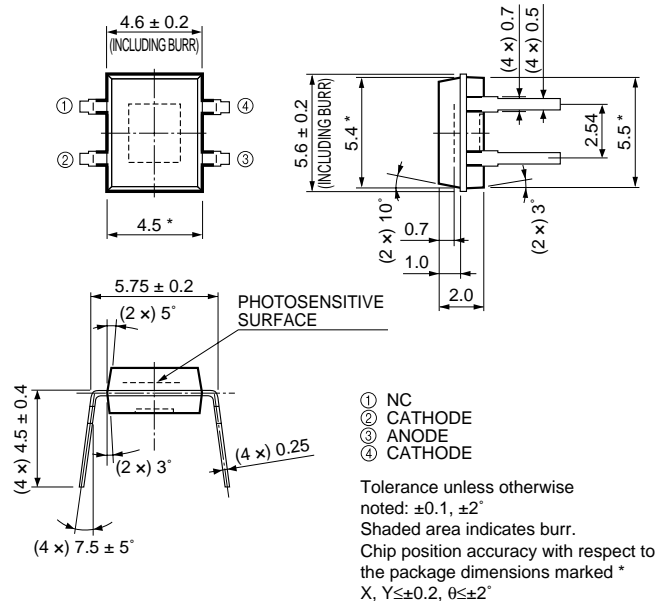
KPINB0300EA

■ Terminal capacitance vs. reverse voltage



KPINB0301EA

■ Dimensional outline (unit: mm)



KPINA0099EA