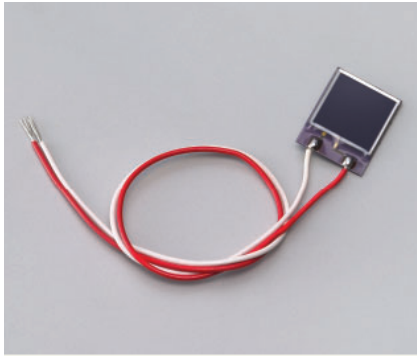


Si PIN photodiode

S3994-01



Si PIN photodiode for optical power meters

The S3994-01 is a Si PIN photodiode designed for optical power meters. The flat glass used as the light input window is less susceptible to scratches than resin windows, allowing easy handling.

Features

- Thin package (1.4 mm max.)
- High sensitivity: 0.25 A/W typ. ($\lambda=400$ nm)
- Large photosensitive area: 10 × 10 mm

Applications

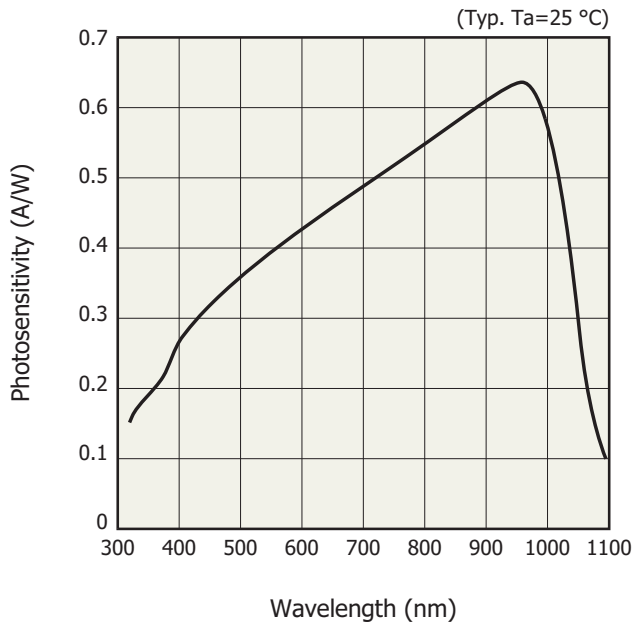
- Optical power meters

Absolute maximum ratings (Ta=25 °C)

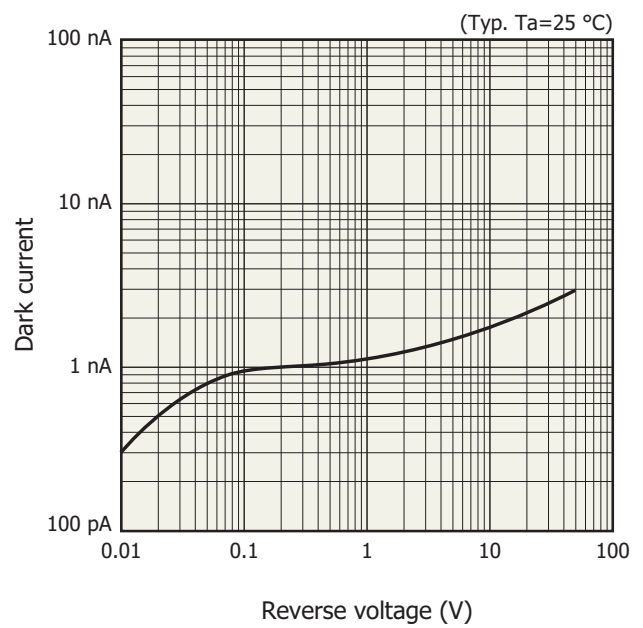
Parameter	Symbol	Value	Unit
Reverse voltage	V _R max	50	V
Operating temperature	T _{opr}	-20 to +60	°C
Storage temperature	T _{stg}	-20 to +80	°C

Electrical and optical characteristics (Ta=25 °C)

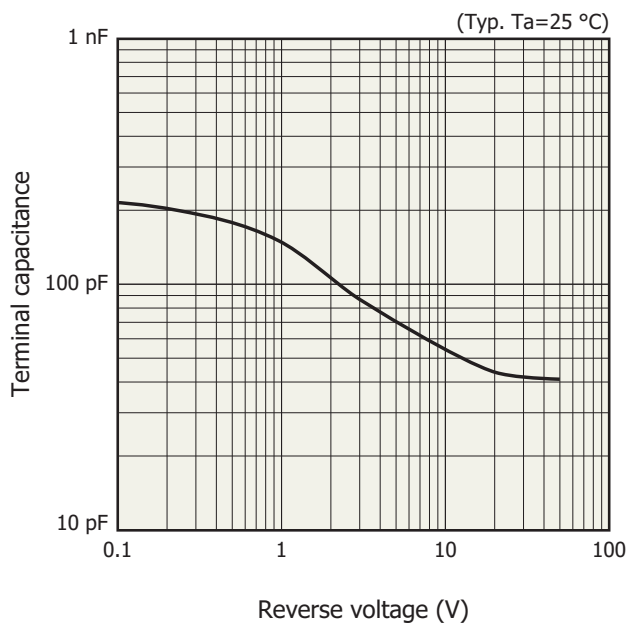
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	λ		-	320 to 1100	-	nm
Peak sensitivity wavelength	λ_p		-	960	-	μ m
Photosensitivity	S	$\lambda=400$ nm	0.20	0.25	-	A/W
		$\lambda=\lambda_p$	0.54	0.65	-	
Dark current	I _D	V _R =30 V	-	3	10	nA
Terminal capacitance	C _t	V _R =30 V, f=1 MHz	-	40	-	pF
Cutoff frequency	f _c	V _R =30 V, R _L =50 Ω -3 dB	-	20	-	MHz

Spectral response

KPINB0198EA

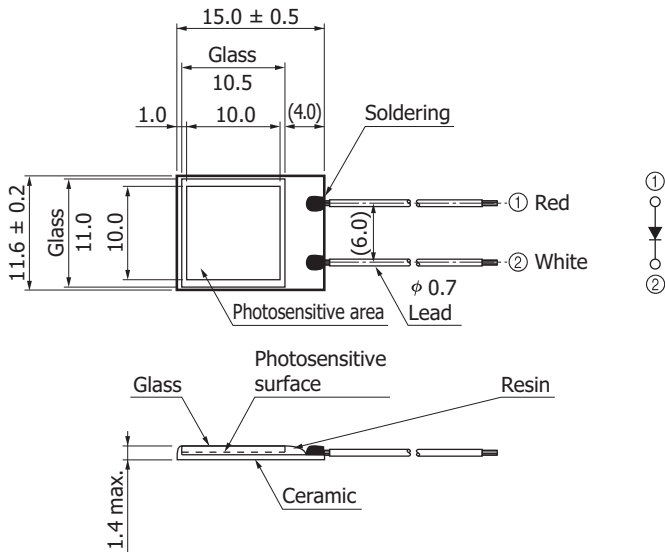
Dark current vs. reverse voltage

KPINB0199EA

Terminal capacitance vs. reverse voltage

KPINB0200EA

Dimensional outline (unit: mm)



KPINA0078EA

Information described in this material is current as of January, 2012.

Product specifications are subject to change without prior notice due to improvements or other reasons. Before assembly into final products, please contact us for the delivery specification sheet to check the latest information.

Type numbers of products listed in the delivery specification sheets or supplied as samples may have a suffix "(X)" which means preliminary specifications or a suffix "(Z)" which means developmental 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.

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