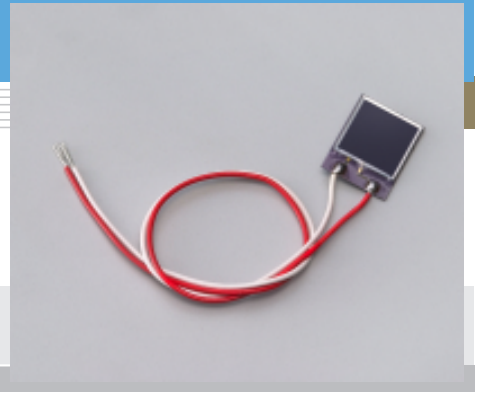


# Si PIN photodiode

## S3994-01

Si PIN photodiode for optical power meters



S3994-01 is a Si PIN photodiode designed for optical power meters. Compared to the previous type (S3994), S3994-01 has an improved anti-reflection film. 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: 0.28 A/W Typ. ( $\lambda=410$  nm)
- Large active area: 10 × 10 mm

### Applications

- Optical power meter

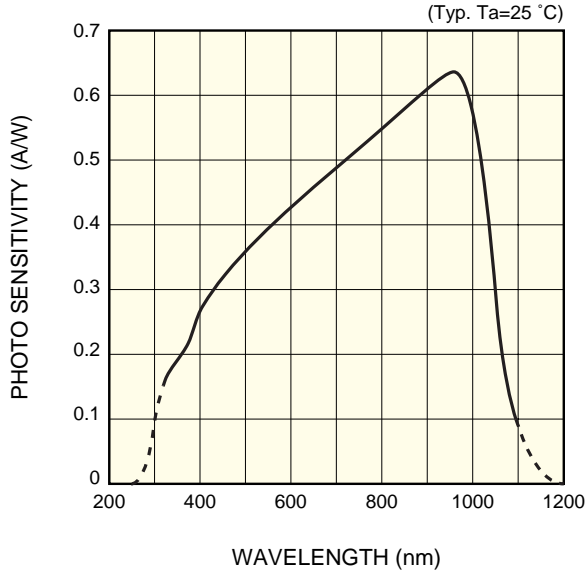
#### ■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Value	Unit
Reverse voltage	VR Max.	50	V
Operating temperature	Topr	-20 to +60	°C
Storage temperature	Tstg	-20 to +80	°C

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

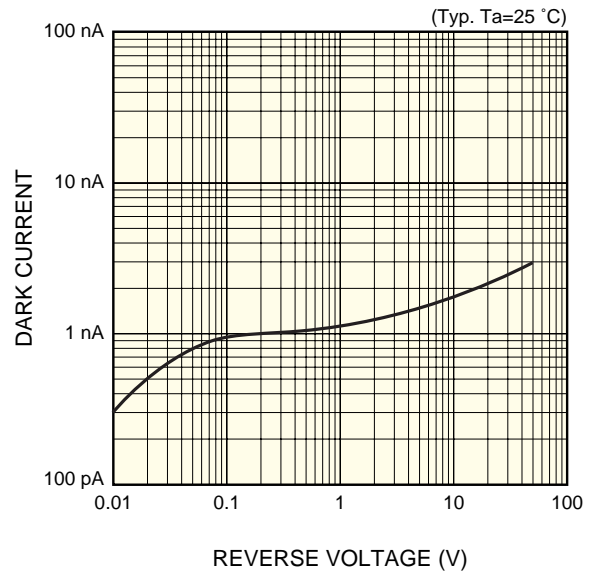
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Spectral response range	$\lambda$		-	320 to 1100	-	nm
Peak sensitivity wavelength	$\lambda_p$		-	960	-	$\mu\text{m}$
Photo sensitivity	S	$\lambda=410$ nm	0.24	0.28	-	A/W
Dark current	ID	VR=30 V	-	3	10	nA
Terminal capacitance	Ct	VR=30 V, f=1 MHz	-	40	-	pF
Cut-off frequency	fc	VR=30 V, RL=50 $\Omega$ -3 dB	-	20	-	MHz

■ Spectral response



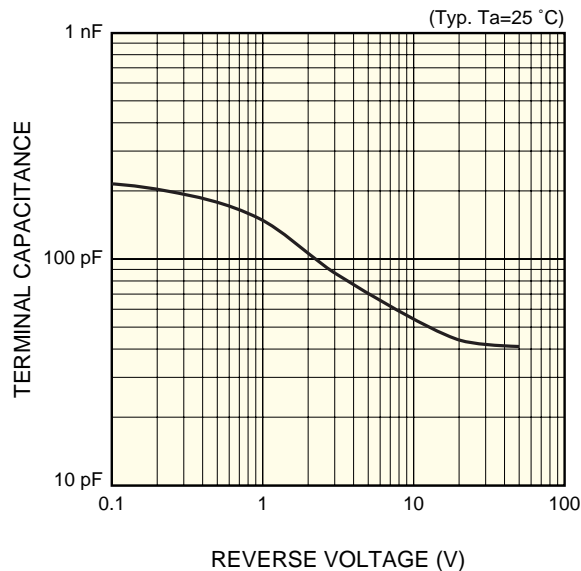
KPINB0198EA

■ Dark current vs. reverse voltage



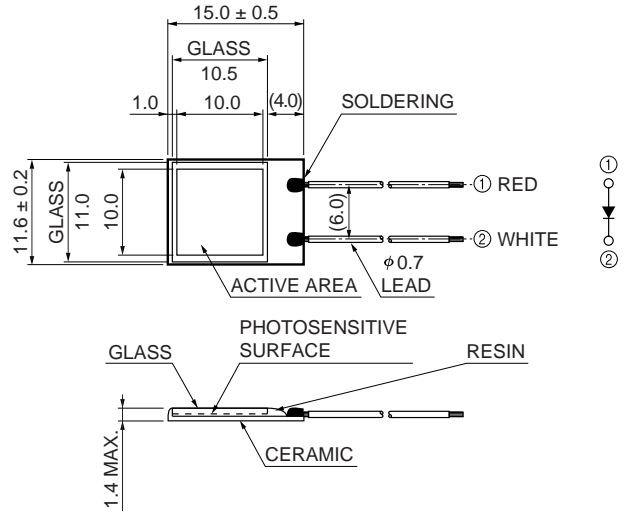
KPINB0199EA

■ Terminal capacitance vs. reverse voltage



KPINB0200EA

■ Dimensional outline (unit: mm)



KPINA0078EA