

## 400-1100nm 5.8mm Si PIN Photodiode

Model: NSP5.8



NSP5.8-Ce

## Applications

- ◆ Optical power meter
- ◆ Optical sensor
- ◆ Fluorescence detector
- ◆ Spectrophotometry/CT scan
- ◆ Industrial automatic control
- ◆ IR/ Laser light Monitoring
- ◆ Medical equipment

## Features

- ◆ 400-1100nm spectral range
- ◆ Low dark current, High reliability
- ◆ Large active area 6mm×6mm
- ◆ non-hermetic Ceramic package with optical glass

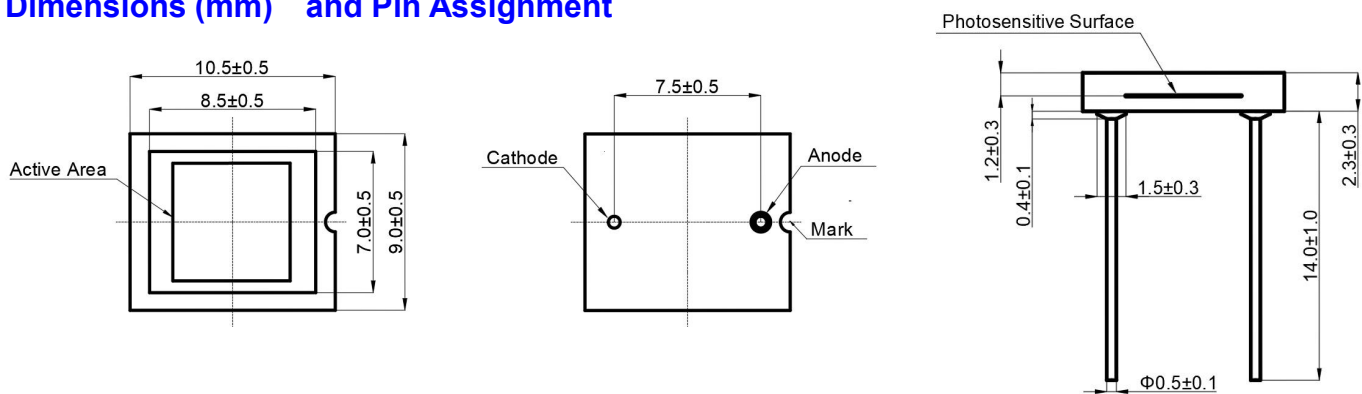
## Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Unit	value
Storage temperature	Tst	°C	-25~+85
Operating temperature	Top	°C	-20~+60
Soldering temperature(time)	Ts (10s)	°C	260
Reverse voltage	Vr	V	15

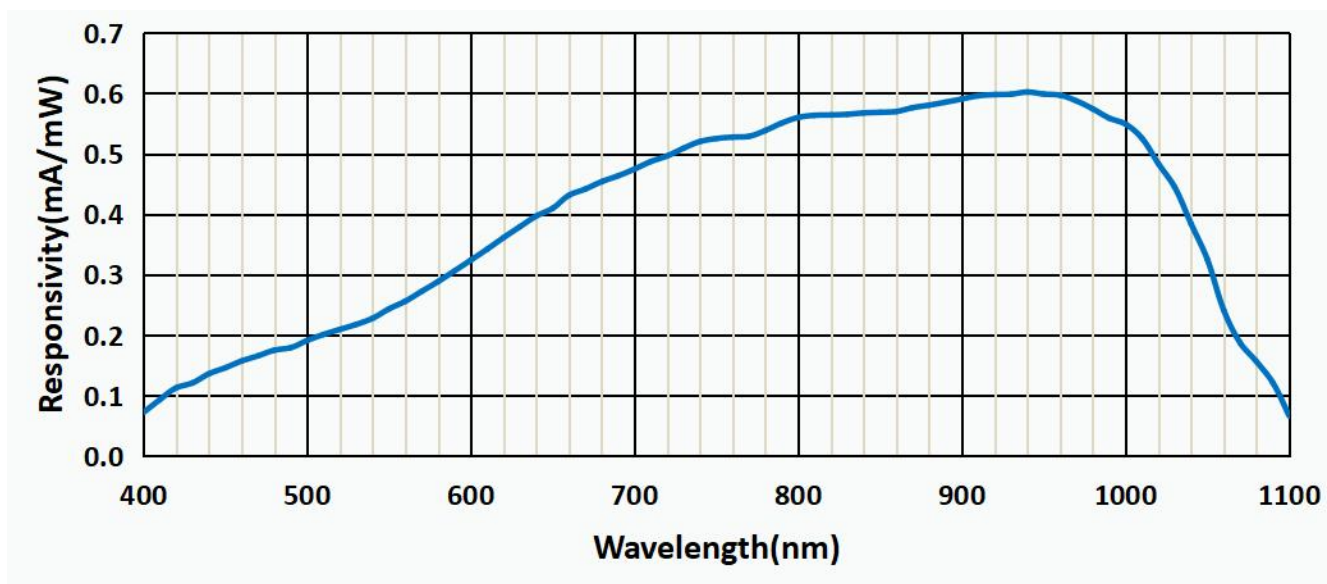
## Optical &amp; electrical characteristics (Tc=25°C)

Parameter	Symbol	Test Conditions	Unit	value (Typ.)
Spectral response range	$\lambda$		nm	400-1100
Active Area			mm	5.8×5.8
Responsivity	Re	Vr=5V, $\lambda$ =405nm	mA/mW	0.05
		Vr=5V, $\lambda$ =650nm	mA/mW	0.35
		Vr=5V, $\lambda$ =850nm	mA/mW	0.50
		Vr=5V, $\lambda$ =1064nm	mA/mW	0.20
Dark current	Id	Vr=0V	pA	10
		Vr=5V	nA	1.2
Capacitance	Ct	f=1MHz, Vr=0V	pF	2100
		f=1MHz, Vr=5V	pF	100
Reverse operating voltage	Vr		V	0-10
Reverse breakdown voltage	VBR	Id=10uA	V	60
Saturated optical power	Ps	Vr =5V	mW	20
Shunt resistance	Rsh	Vr =10mV	M $\Omega$	100
Package	Non-hermetic Ceramic package with optical glass			

### Dimensions (mm) and Pin Assignment



### The typical spectral response curve( $T_c=25^\circ\text{C}$ )



### Order Information

NSP5.8-X: N=Ninglight SP=Si PD 5.8=5.8mm×5.8mm active Area

X=Ce: Non-hermetic Ceramic package with optical glass

### The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protection is required in storage, transportation and using.