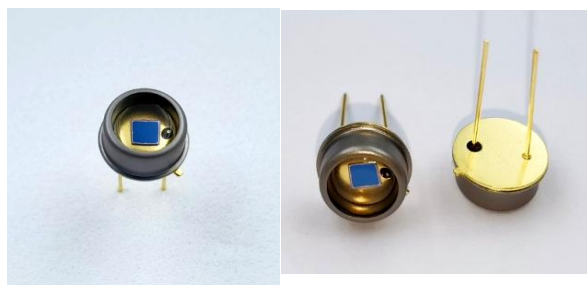


**400-1100nm 2.8mm Si PIN Photodiode****Model: NSP2.8****NSP2.8-F****Applications**

- ◆ 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
- ◆ Active area 2.8mm×2.8mm
- ◆ Hermetical TO5 Can

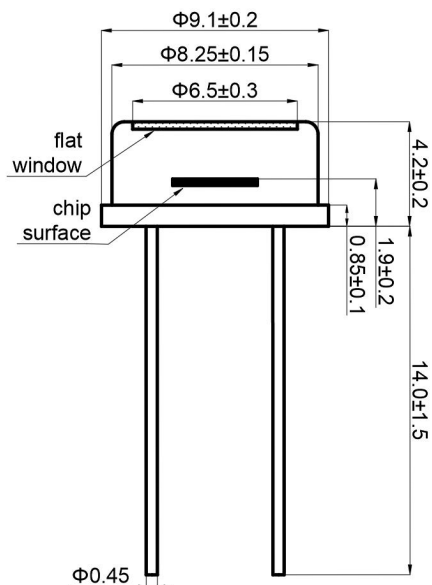
**Absolute Maximum Ratings (Tc=25°C)**

Parameter	Symbol	Unit	value
Storage temperature	Tst	°C	-40 ~ +100
Operating temperature	Top	°C	-40 ~ +85
Soldering temperature(time)	Ts ( 10s )	°C	260
Reverse voltage	Vr	V	20

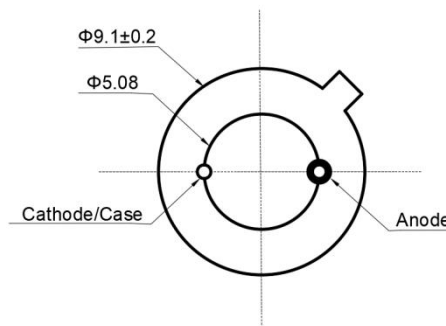
**Optical & electrical characteristics (Tc=25°C)**

Parameter	Symbol	Test Conditions	Unit	value (Typ.)
Spectral response range	$\lambda$		nm	400-1100
Active Area			mm	2.8×2.8
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	pA	300
response time	Tr	RL =50 $\Omega$ , Vr=5V	ns	50
Capacitance	Ct	f=1MHz, Vr=0V	pF	1000
		f=1MHz, Vr=5V	pF	30
Reverse operating voltage	Vr		V	0-15
Reverse breakdown voltage	VBR	Id=10uA	V	60
Saturated optical power	Ps	Vr =5V	mW	20
Shunt resistance	Rsh	Vr =10mV	M $\Omega$	400
Package	Hermetic TO5 Can			

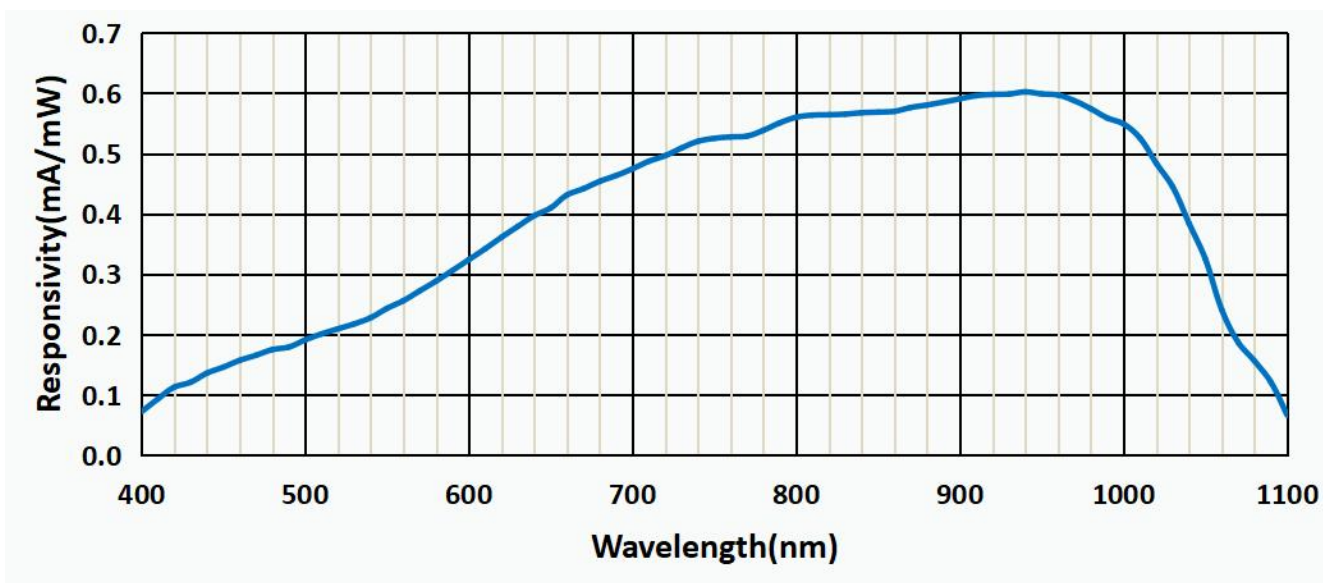
### Dimensions (mm)



### Pin Assignment (Bottom View)



### The typical spectral response curve(Tc=25°C)



### Order Information

NSP2.8-X: N=Ninglight SP=Si PD 2.8=2.8mm×2.8mm active Area  
 X=F: TO-5 Can with flat window Φ8.25mm nickel cap

### 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.