

400-1100nm 1mm Si PIN Photodiode**Model: NSP1000****NSP1000-F2****Applications**

- ◆ Optical power meter
- ◆ Optical sensor
- ◆ Science analysis
- ◆ Industrial automatic control
- ◆ Space light detect

Features

- ◆ Top illumination Planar PIN PD
- ◆ Low dark current, High reliability
- ◆ Active area 1mm×1mm
- ◆ Hermetical TO46 Can

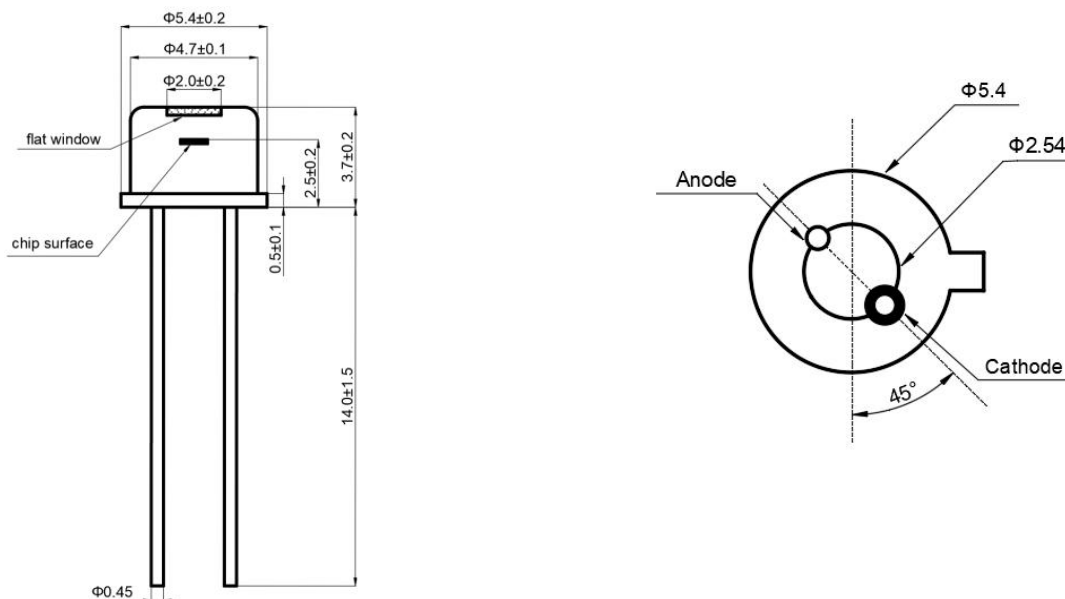
Absolute Maximum Ratings (Tc=25°C)

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	15

Optical & electrical characteristics (Tc=25°C)

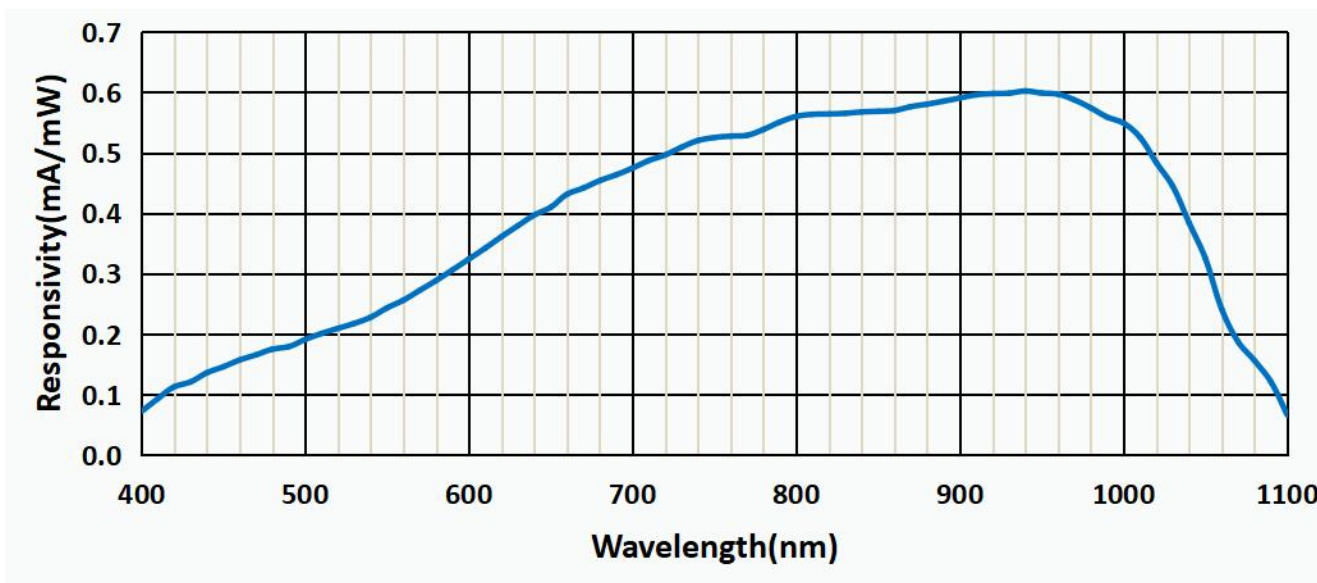
Parameter	Symbol	Test Conditions	Unit	value (Typ.)
Detection range	λ		nm	400-1100
Active Area			mm	1×1
Responsivity	Re	Vr=5V, λ =405nm	mA/mW	0.05
		Vr=5V, λ =650nm	mA/mW	0.35
		Vr=5V, λ =850nm	mA/mW	0.5
		Vr=5V, λ =1064nm	mA/mW	0.15
Dark current	Id	Vr=0V	pA	5
		Vr=5V	pA	200
response time	Tr	RL =50 Ω , Vr=5V	ns	15
Capacitance	Ct	f=1MHz, Vr=0V	pF	500
		f=1MHz, Vr=5V	pF	7
Reverse operating voltage	Vr		V	0-10
Reverse breakdown voltage	VBR	Id=10uA	V	60
Saturated optical power	Ps	Vr =5V	mW	15
Shunt resistance	Rsh	Vr =10mV	G Ω	2
Package	Hermetic TO46 Can			

Dimensions (mm)**Pin Assignment (Bottom View)**



NSP1000-F2

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



Order Information

NSP1000-X: N=Ninglight SP=Si PD 1000=1mm×1mm active Area
 X=F2: TO-46 Can with 2mm flat window 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.