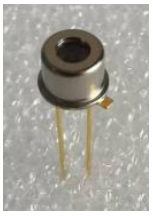
杭州柠光科技有限公司
手机/微信：19957271926 邮箱：19957271926@163.com 网址：www.nlight66.com

1mm Si PIN Photodiode

Model:NSP1000


NSP1000-F2


NSP1000-FC1


NSP1000-FC2

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 or with receptacle

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Unit	value
Storage temperature	Tst	℃	-40 ~ +100
Operating temperature	Top	℃	-40 ~ +85
Lead Solder Temperature	Tes	℃	260
Lead Soldering Time	Ts	S	10
Reverse voltage	Vr	V	15

Optical & electrical characteristics (Tc=25℃)

Parameter	Symbol	Test Conditions	Unit	value（Typ.）
Detection range	λ		nm	400-1100
Active Area			mm	1×1
Responsivity	Res	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	Tre	RL =50Ω,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	Pso	Vr =5V	mW	15
Shunt resistance	Rsh	Vr =10mV	GΩ	2
Package	Hermetic TO46 Can or with receptacle			

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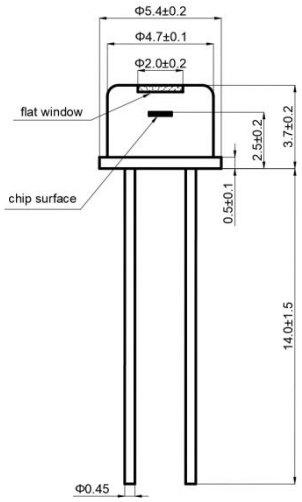
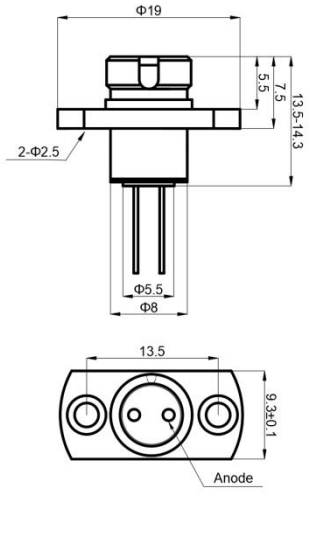
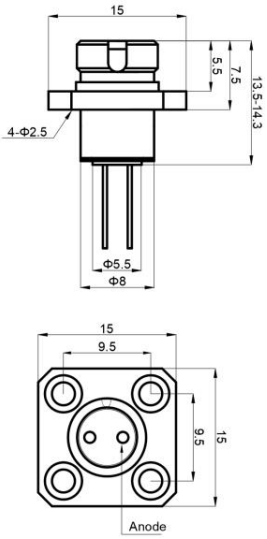
Dimensions (mm)



NSP1000-F2

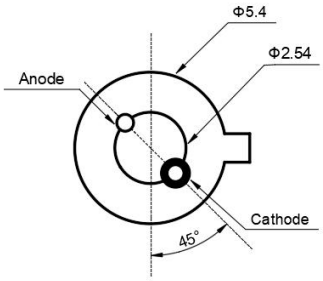


NSP1000-FC1

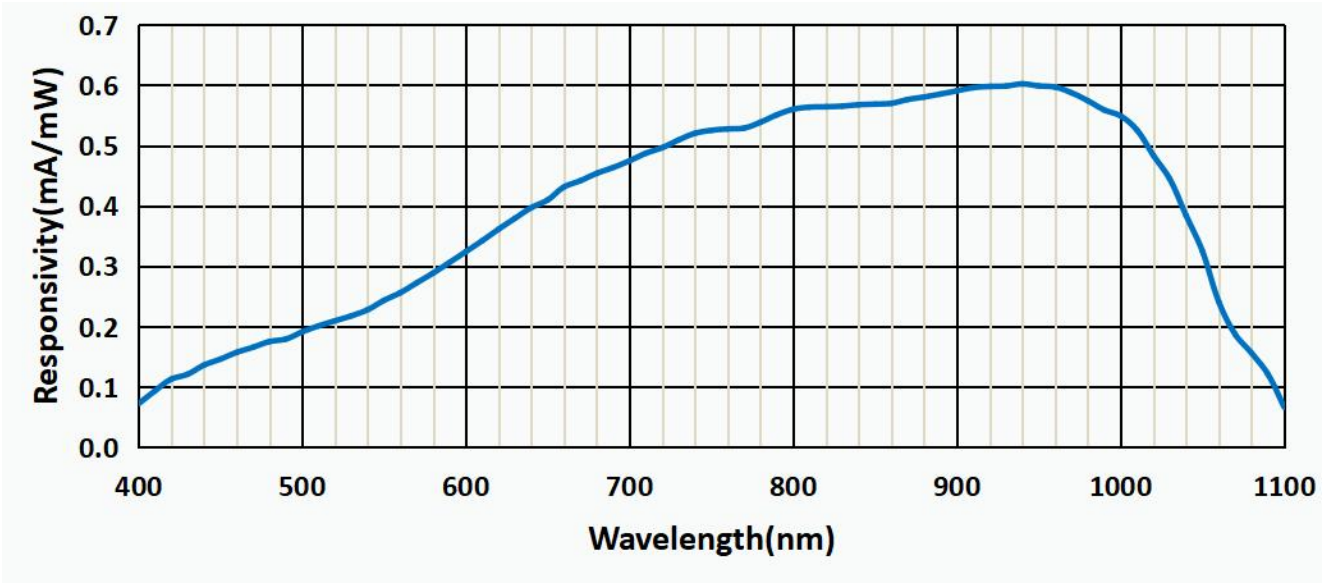


NSP1000-FC2

Pin Assignment（Bottom View）



The typical spectral response curve(Tc=25℃)



Order Information

NSP1000-X：N=Nlight SP=Si PD 1000=1mm×1mm active Area

X=F2： TO-46 Can with 2mm flat window cap

X=FC1：TO-46 Can with fixed receptacle with FC connector and 2 pieces of fix holes

X=FC2：TO-46 Can with fixed receptacle with FC connector and 4 pieces of fix holes

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.