

900-1700nm 500um InGaAs PIN Photodiode**Model:NIP500****NIP500-F2****Applications**

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

Features

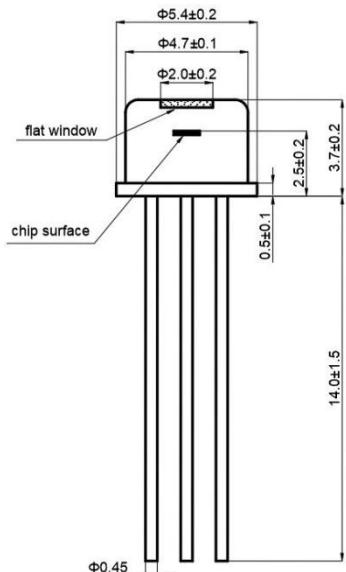
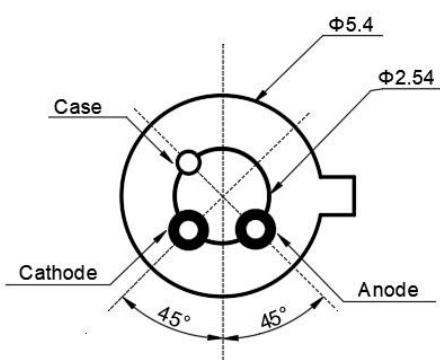
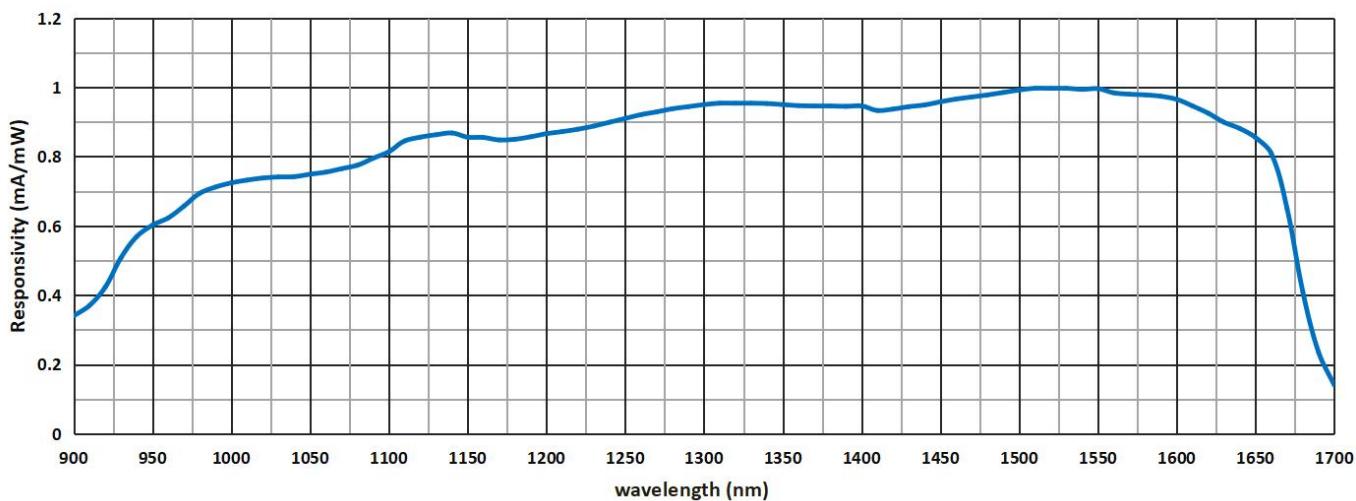
- ◆ Top illumination Planar PIN PD
- ◆ Low dark current, High reliability
- ◆ Active area diameter 500um
- ◆ Hermetical TO46 Can

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	10

Optical & electrical characteristics (Tc=25°C)

Parameter	Symbol	Test Conditions	Unit	value (Typ.)
Response spectrum	λ		nm	900-1700
Active area diameter	Φ		um	500
Responsivity	Re	Vr=0V,λ=1310nm	mA/mW	0.85
		Vr=0V,λ=1550nm	mA/mW	0.90
Dark current	Id	Vr=0V	pA	5
		Vr=5V	pA	50
response time	Tr	RL =50Ω, Vr=5V	ns	2.5
Capacitance	Ct	f=1MHz, Vr=0V	pF	950
		f=1MHz, Vr=5V	pF	16
Reverse operating voltage	Vr		V	0-5
Reverse breakdown voltage	VBR	Id=10uA	V	30
Saturated optical power	Ps	Vr =5V	mW	7
Shunt resistance	Rsh	Vr =10mV	GΩ	2
Package		Hermetic TO46 Can		

Dimensions (mm)**Pin Assignment (Bottom View)****NIP500-F2****Typical responsivity curve($T_c=25^\circ\text{C}$)****Order information**

NIP500-X: N=Ninglight IP=InGaAs PD 500=500um active area diameter

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.