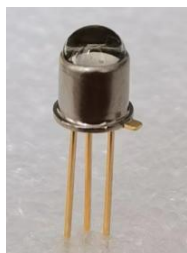


450-890nm 500um GaAs PIN Photodiode**Model:NGP500****NGP500-F3****NGP500-BL****Applications**

- ◆ 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

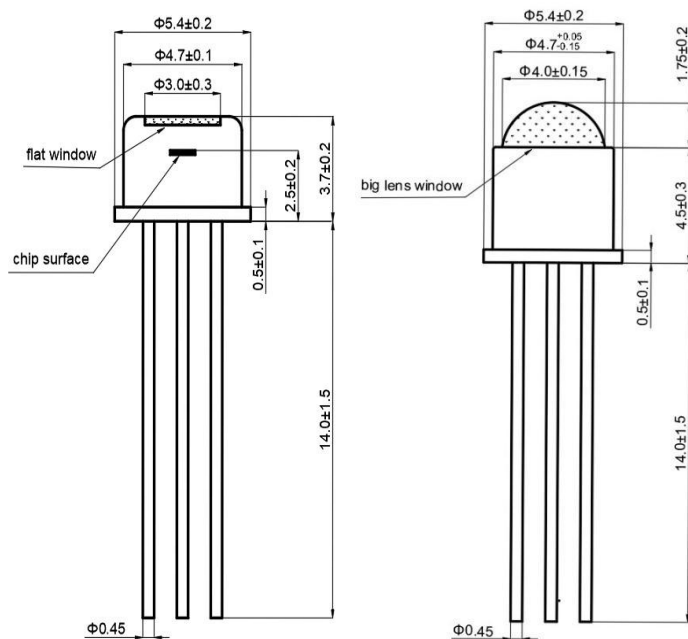
Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Unit	value
Storage temperature	Tst	℃	-40 ~ +100
Operating temperature	Top	℃	-40 ~ +85
Soldering temperature(time)	Ts (10s)	℃	260

Optical & electrical characteristics (Tc=25℃)

Parameter	Symbol	Test Conditions	Unit	value (Typ.)
Response spectrum	λ		nm	450-890
Active area diameter	Φ		um	500
Responsivity	Re	Vr=0V, λ =450nm	mA/mW	0.05
		Vr=0V, λ =650nm	mA/mW	0.3
		Vr=0V, λ =850nm	mA/mW	0.5
Dark current	Id	Vr=0V	pA	5
		Vr=5V	pA	100
response time	Tr	R L =50Ω, Vr=5V	ns	3
Capacitance	Ct	f=1MHz, Vr=0V	pF	500
		f=1MHz, Vr=5V	pF	10
Reverse operating voltage	Vr		V	0-5
Reverse breakdown voltage	VBR	Id=10uA	V	40
Saturated optical power	Ps	Vr =5V	mW	5
Shunt resistance	Rsh	Vr =10mV	GΩ	1
Package	Hermetic TO46 Can			

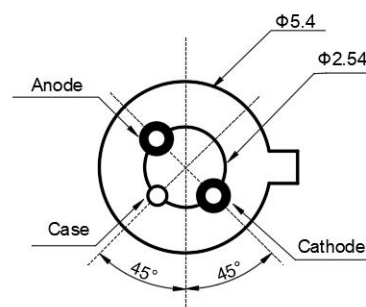
Dimensions (mm)



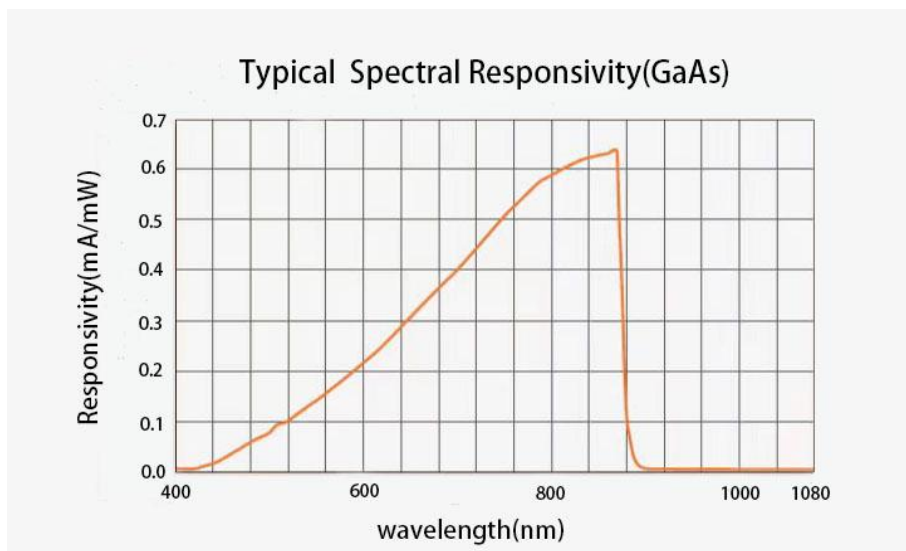
NGP500-F3

NGP500-BL

Pin Assignment (Bottom View)



Typical responsivity curve($T_c=25^\circ\text{C}$)



Order Information

NGP500-X: N=Ninglight IP=InGaAs PD 500=500um active area diameter

X=F3: TO-46 Can with 3mm flat window cap

X=-BL: TO-46 Can with big ball lens 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.