

InGaAs PIN Photodiode

Model: OPR300-IGA26-O

Features

- Low voltage operation
- Enhance InGaAs PIN: 1000 to 2600nm
- Isolated type is also available

Applications

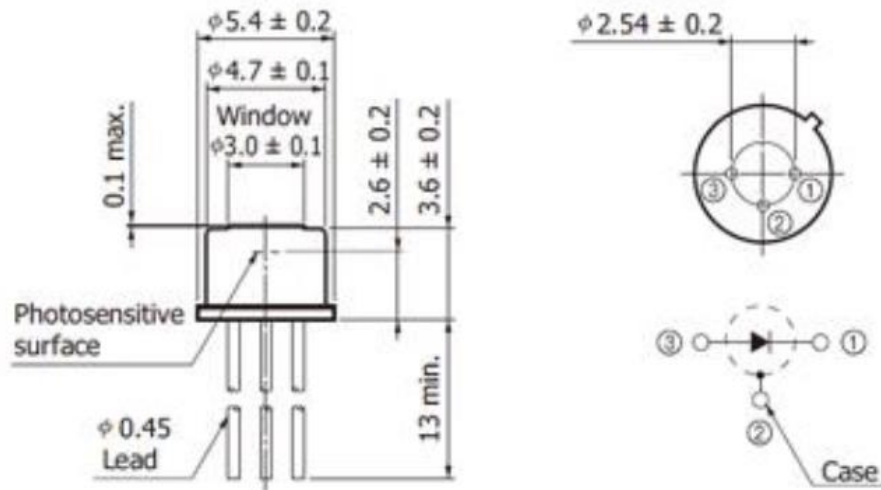
- Optical Instrumentation
- NIR Sensing
- Laser Power Measurement
- Power meters

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

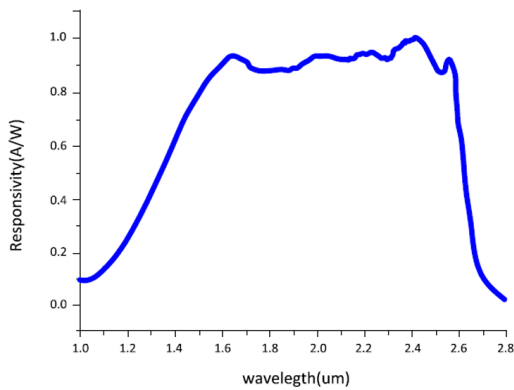
Parameter	Symbol	Value			Unit	Test conditions
		Min.	Typ.	Max.		
Chip Size	s	800*800*175			μm	
Active area	A	$\Phi 300$			μm	
Forward current	I_F	10			mA	
Reverse current	I_R	10			mA	
Dark current	I_D			0.46 19.8	μA	$V_R=0\text{V}$ $V_R=1\text{V}$
Cut frequency	f_C		45		MHz	$V_R=0\text{V}; R_L=50\Omega$
Reverse breakdown voltage	$V_{(BR)R}$			1	V	$I_R=10\mu\text{A}; E_V=0\text{lX}$
Junction Capacitance	C_j		180		pF	$V_R=0\text{V}; f=1\text{MHz}$
Photo sensitivity	S_R	0.97			A/W	$V_R=0.1\text{V}; \lambda=2000\text{nm}$
Spectral Application Range	λ_{range}	1000		2600	nm	
Spectral Response-Peak	λ_p		2500		nm	
Shunt resistance	R_{sh}		8		$\text{K}\Omega$	$V_R=10\text{mV}$
Angular Resp 50% resp pt	$\theta_{1/2}$		± 35		Degrees	λ
Noise Equivalent Power	NEP		5.16×10^{-10}		$\text{W/Hz}^{1/2}$	$\lambda=2.5\mu\text{m}$

Block Diagram and Pin description

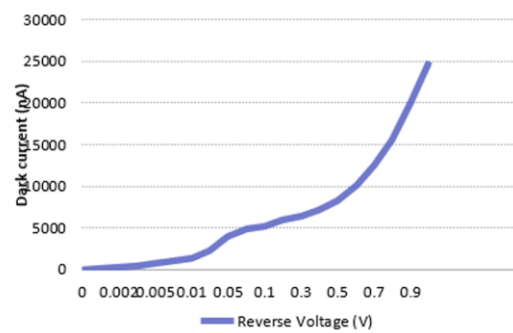
Note: All dimension are in millimeters.



Spectral response



Dark current vs. UR



Capacitance vs. UR

