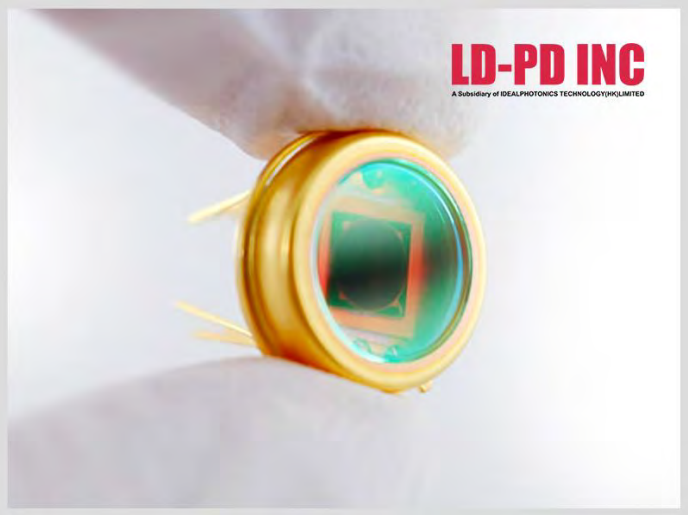
Φ5mm Low Capacitance InGaAs PD Photodetector



Description

Φ5mm low capacitance InGaAs PD photodetector is optimized for capacitance reduction of large photosensitive area photodiodes (commonly called MPD). It has the characteristics of high responsivity, high bandwidth, high reliability, etc. The spectral response range is 0.9~1.7μm, which can meet the needs of Laser warning, lidar, photoelectric sensing, optical power meter and other application requirements.

Features

- Front planar structure, providing bare chip or TO package devices
- Low capacitance
- Low dark current
- High reliability

Application

- Laser alarm
- Optical power meter
- Lidar
- Instrumentation

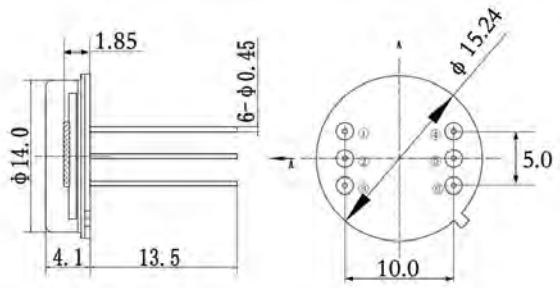
E/O Characteristics

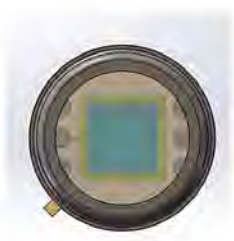
Parameter	Syb	Unit	Test Conditions	Min	Typ	Max
Active Diameter	Φ	μm			5000	
Reverse Voltage	VBR	V	ID=10uA，No light	10	-	-
Responsivity	R1064	A/W	λ=1.06μm，VR = -5V	0.60	0.65	-
	R1550	A/W	λ=1.55μm，VR = -5V	0.95	1.05	-
ResponseTtime	tr	ns	RL = 50Ω，VR = -5V		60	
-3dBBandwidth	f-3dB	MHz	RL = 50Ω，VR = -5V		7	
Capacitance	C	pF	f = 1MHz，RL = 50Ω，VR = -2V		500	
Dark Current	ID	nA	VR = -5V，No light		20	

Absolute Maximum Ratings

Item	Parameter/Symbol	Ratings
Absolute Maximum Ratings	Storage temperature，Tstg	- 60℃~ + 125℃
	Working temperature，Tc	- 40℃~ + 85℃
	Soldering temperature (only pin soldering 5s), Tp	260℃
	Forward Current, IF	100mA
	average photocurrent，Ip	100mA
	Total power consumption，Ptot	100mW
	Incident optical power density，Φin	200kW/cm²

Dimensions and Pin definitions





PIN	FUNCTION
①	P pole
②	N pole
③	GND
④	GND
⑤	N pole
⑥	P pole

Unit (mm)