800-1700nm InGaAs biased photodetector



Description

LD-PD PTE.LTD's InGaAs biased photodetector has a sensitivity range of 500nm~2600nm, extremely low noise, fast response, no gain, low cost, suitable for conventional photodetection applications, excellent performance, high cost performance, and provides omnidirectional technical support, which is often used in visible light and infrared light measurement.

Features

- The photosensitive range covers 500nm~2600nm, and is often used for visible light and infrared light measurement
- Biased detector, extremely low noise, fast response, no gain
- Low cost, suitable for conventional photoelectric detection applications
- Excellent performance, high cost performance, all-round technical support

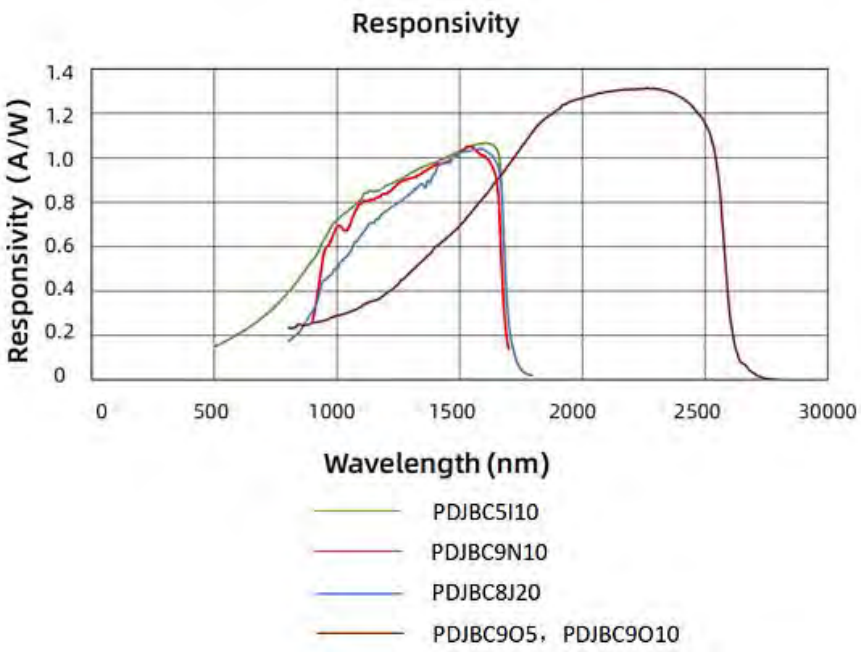
Application

- Visible and infrared light measurements

Key Parameter

Parameters	Value				
Wavelength range	500-1700nm	900-1700nm	800-1700nm	900-2600nm	
Photosensitive size	Φ 1.0mm	Φ1.0mm	Φ2.0mm	Φ0.5mm	Φ1.0mm
Bandwidth range	70MHz	35MHz	11.7MHz	20.6MHz	14MHZ
Rise time (@50Q)	5ns	10ns	30ns	17ns	25ns
NEP	2.0x10-14W/Hz1/2	2.5x10-14W/Hz1/2	1.3x10-13W/Hz1/2	1.0x10-12W/Hz1/2	1.5x10-12W/Hz1/2
Dark current	1.5nA(Typ.)/10nA(Max)	1.0nA(Typ.)/25nA(Max)	1.0nA(Typ.)/25nA(Max)	2uA(Typ.)/20uA(Max)	5uA(Typ.)/40uA(Max)
Junction capacitance	50pF(TyP.)	80pF(TyP.)	80pF(TyP.)	140pF(TyP.)	500pF(TyP.)
Bias voltage	5V		1.8V		
Output current	0~5mA				
Output voltage	~9V(Hi-Z); ~170 mV(50Ω)				
Photosensitive surface depth	0.09"(2.2 mm)				
Operating temperature	10-50°C				
Storage temperature	-20-70°C				
Detector net weight	0.10kg				
Undervoltage index	Vout ≤9V(Hi-Z) Vout ≤170mV(502)				
Appearance size	2.79X1.96"X0.89"(70.9 mmX49.8 mm X 22.5 mm)				
Power supply battery	Power switch	Signal interface	Battery monitoring	Strut interface	Optical interface
A23, 12VDC, 40mAh	Slide switch	BNC female socket	Momentary push button	M4X2	SM1 X1 SM0.5 x 1

Response Curve



1550nm 4mW Signal test Curve



Product Configuration





Accessory 1: A23, 12V battery



Accessory 2: BNC-BNC signal cable

Optional configuration table

Silicon based biasing photodetector	Optional Configuration				
Product Name	Material	Type	Feature	Wavelength range Active Area	Reserve Optional configuration
PD:" Photodetector"	J: InGaAs	B: Bias type	C: Conventional type	5110:500-1700nm, φ1.0mm	
				9N10:900-1700nm, φ1.0mm	
				8J20:800-1700nm, φ2.0mm	
				905:900-2600nm, φ0.5mm	
				9010:900-2600nm, φ1.0mm	

Dimension

