PD10D series amplified photodetector

❖ OVERVIEW

The PD10D Series is a low noise, amplified photodetector designed for a variety of test and measurement applications.The device integrates a high-performance InGaAs(Si) PIN photodiode and is ideal for evaluating pulsed lasers and modulation applications.This model has good linearity over the input range, resulting in low analog signal distortion.

❖ FEATURES

- High temperature stability
- Low noise
- All-metal shell with excellent shielding performance
- M6 threaded holes for easy installation

❖ APPLICATIONS

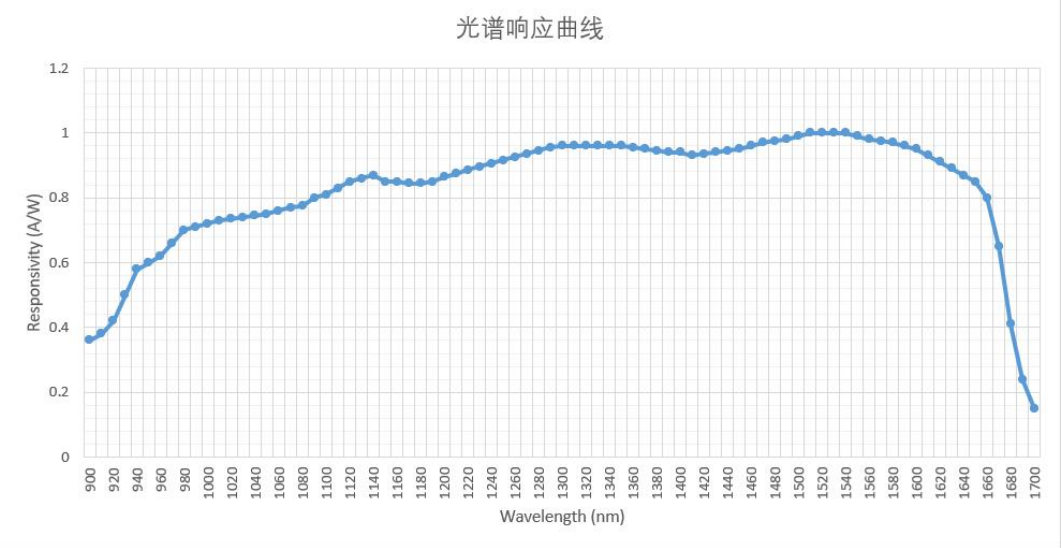
- Detect low light signals
- Detection of laser pulses
- RF and pulse waveform extraction from laser light sources
- Heterodyne laser beat frequency signal detection

❖ SPECIFICATIONS

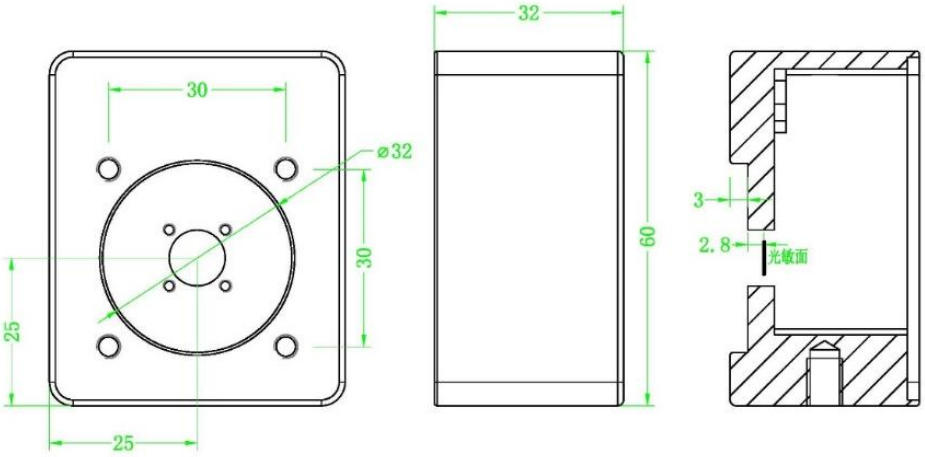
Item	PD10D-NIR-10k	PD10D-NIR-70k	PD10D-NIR-200k
Detector	InGaAs		
Wavelength Range	900-1700nm		
Peak Response	0.9A/W @ 1550nm		

Active Area	1mm	2mm	2mm
Bandwidth	DC-10kHz	DC-70kHz	DC-200kHz
Rise Time	35us	5us	1.8us
Transimpedance gain	3kV/A	1000kV/A	100kV/A
Minimum optical power	-26.5dBm (2.22uw)	-56.5dBm (2.22nw)	-47.8dBm (16.6nw)
Saturated optical power	2.7dBm (1.85mw)	-22.6dBm (5.55uw)	-12.6dBm (55.5uw)
Noise voltage@50Ω	≤3mVpp	≤2mVpp	≤1.5mVpp
Maximum output amplitude@Hiz	5.0V		
Work voltage	9-12VDC		
Work current	<100mA		
Output connector	SMA		
Output impedance	50Ω		
Output coupling mode	DC		
Work temperature	-20~65℃		
Storage temperature	-40~85℃		
Package Size	60mm x 50mm x 32mm（LxWxD, without connector）		

❖ RESPONSE CURVE



❖ MECHANICAL DRAWING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