

## PD10A series amplified photodetector

### OVERVIEW

The PD10A series is a high-speed, amplified photodetector. The device integrates a high-performance InGaAs PIN photodiode, suitable for evaluating pulsed lasers and high frequency modulation applications, and a variety of test and measurement applications including fast optical signal probing. This model has good linearity over the input range, resulting in low analog signal distortion. The housing has an FC optical connector that is compatible with FC/PC and FC/APC connectors

### FEATURES

- ◆ It can adapt to various temperatures and has high stability
- ◆ Low noise, high gain
- ◆ All-metal shell with excellent shielding performance
- ◆ M6 threaded holes for easy installation and integration

### APPLICATIONS

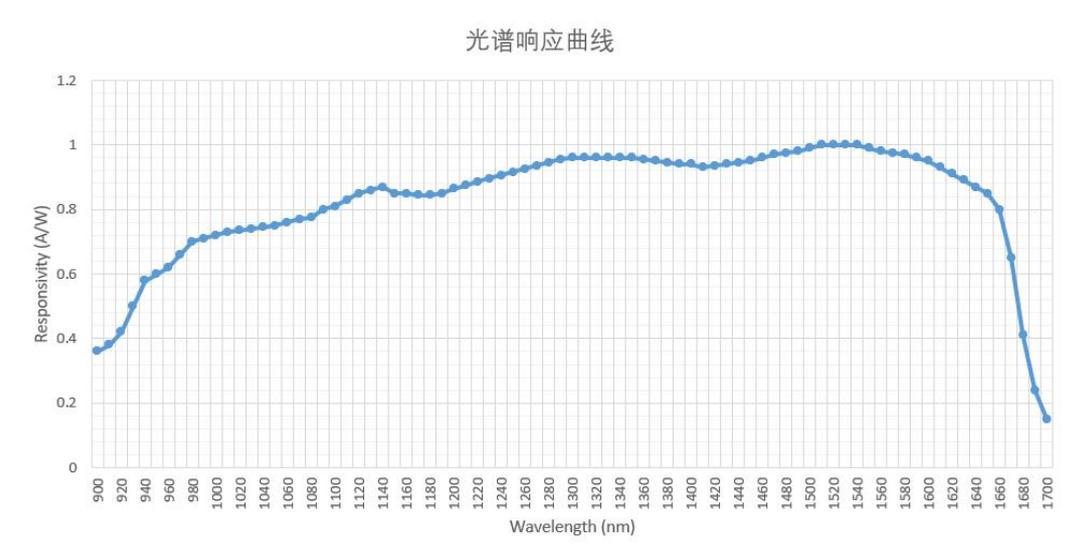
- ◆ Detect low light signals
- ◆ Detect fast laser pulses
- ◆ RF and pulse waveform extraction from laser light sources
- ◆ Heterodyne laser beat frequency signal detection

### SPECIFICATIONS

Item	PD10A-200M	PD10A-500M	PD10A-1G
Detector	InGaAs		
Wavelength Range	800-1700nm		
输入接口	FC		
Active Area	75um		
Peak Response	0.9A/W @ 1550nm		
Bandwidth	DC-220MHz	DC-500MHz	DC-1GHz
Rise Time	1.8ns	0.7ns	350ps
Maximum gain	$1.6 \times 10^4$ V/W	$1.1 \times 10^3$ V/W	610V/W
Minimum optical power	-30.0dBm (1uw)	-23.5dBm (4.5uw)	-21.8dBm (6.6uw)
Saturated optical power	-6.0dBm (0.25mw)	3.6dBm (2.3mw)	2.1dBm (1.6mw)
Noise voltage	<16mV	<5mV	<4mV

Maximum output amplitude	4.0V	2.5V	1.0V
Operating voltage	12VDC $\pm$ 10%		
Operating current	<100mA		
Output connector	SMA		
Output impedance	50 $\Omega$		
Output coupling mode	DC		
Operating temperature	-20~65°C		
Storage temperature	-40~85°C		
Package Size	81mm x 64mm x 25mm (长 x 宽 x 厚, 不含连接器)		

## RESPONSE CURVE



MECHANICAL DRAWING

