

InGaAs APD Photodetector



Description:

High-speed and low-noise avalanche photoelectric balance detection module integrates low-noise APD detector, low-noise broadband transimpedance amplifier, ultra- low noise isolation power supply, high-voltage power supply; isolation power supply ensures that the output signal is not affected by external power supply; APD temperature compensation improves the stability of detection module. Avalanche photodetectors are characterized by high gain, high sensitivity, high bandwidth and low noise.

Features:

- Low Noise and High Gain
- Built-in high voltage power supply
- Temperature compensation
- Compact structure
- Built-in low noise isolation power supply

Application:

- Optical Fiber Sensing
- Optical Fiber Communication
- Laser Ranging
- Spectrometry

Specifications:

Product Model	APD-100M-A	APD-200M-A	APD-300M-A	APD-400M-A	APD-500M-A	APD-800M-A	APD-1G-A	APD-1.2G-A	APD-1.5G-A	APD-2G-A	APD-2.5G-A	APD-5G-A	unit
Detector	InGaAs												
Wavelength	800~1700												nm
Bandwidth	100M	200M	300M	400M	500M	800M	1G	1.2G	1.5G	2G	2.5G	5G	Hz
Detector Responsivity	9	9	9	9	9	9	9	9	9	9	9	9	V/W
Transimpedance Gain	300K	300K	300K	100K	50K	300K	300K	300K	200K	150K	150K	30K	V/W
Saturated Input Optical Power	13	13	13	39	78	13	13	13	20	26	26	78	uW
NEP	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	pW/√(Hz)
Output Impedance	50	50	50	50	50	50	50	50	50	50	50	50	Ω
Output Coupling Mode	DC/AC	DC/AC	DC/AC	DC/AC	DC	AC	AC	AC	AC	AC	AC	AC	
Supply Voltage	5	5	5	5	5	12	12	12	12	12	12	12	V
Supply Current	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	A
Optical Input	FC/APC (or Free Space)											FC/APC	
Radio Frequency Output	SMA											SMA	
Shape Size	65*50*20					65*50*25					80*90*25		mm

Test Result:

