

Si APD Balance Photodetector



Description:

High-speed and low-noise avalanche photoelectric balance detection module integrates low-noise APD detector, low-noise broadband transconductance amplifier, ultra-low noise isolation power supply, high-voltage power supply, temperature compensation; 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 photodetector has the characteristics of 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
- Laser Ranging
- Spectrometry

Specifications:

Product Model	BAPD-100M-B	BAPD-200M-B	BAPD-300M-B	BAPD-1G-B	BAPD-2G-B	Unit
Detector Model	Si					
Wavelength	400~1100					nm
Bandwidth	100M	200M	300M	1G	2G	Hz
Detector Responsivity	25	25	25	25	25	AWW@850nm
Transimpedance Gain	300K	300K	300K	300K	300K	V/W
Saturated Input Optical Power	13	13	13	13	13	uW
NEP	0.18	0.18	0.18	0.18	0.2	pW/ $\sqrt{\text{Hz}}$
Output Impedance	50	50	50	50	50	Ω
Output Coupling Mode	DC/AC	DC/AC	DC/AC	AC	AC	
Supply Voltage	5	5	5	12	12	V
Supply Current	0.5(max)	0.5(max)	0.5(max)	0.5(max)	0.5(max)	A
Optical Input	FC/APC (or Free Space)					
Radio Frequency Output	SMA					
Shape Size	80*90*25					mm