

400-1100nm Si Balance Photodetector 500MHz



● Product Description

The high-speed low-noise balance photodetector module, a low-noise broadband transimpedance amplifier and an ultra-low noise power supply. It has the characteristics of high gain, high sensitivity, high bandwidth, low noise, high common mode rejection ratio, etc. It can effectively reduce the common mode noise of the signal and improve the signal-to-noise ratio of the system.

● Product features

Low noise、 High gain、 High bandwidth、 Compact structure、 Built-in low-noise isolated power supply



● Part Number

MP-BPD-M-S-500-F/S-D

● Application area

Distributed fiber optic sensing、 Laser wind radar、 Optical coherence tomography、 Spectral measurement、 ns- level optical pulse detection

● Core parameters

Wavelength	Bandwidth	Responsivity
400-1100nm	500MHz	0.55A/W@850nm

● General Parameters

Technical Parameters

Material	Si					
Wavelength	400~1100	400~1100	400~1100	400~1100	400~1100	nm
Bandwidth	100M	200M	350M	500M	1G	Hz
Detector Responsivity	0.55@850nm	0.55@850nm	0.55@850nm	0.55@850nm	0.55@850nm	A/W
Transimpedance Gain	30K	30K	30K	30K	30K	V/A
Saturated Input Optical Power	250	250	250	250	250	μW
NEP	12	12	12	13	13	pW/Sq



Material	Si					
						rt(Hz)
Common Mode Rejection Ratio	>25	>25	>25	>25	>25	dB
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 (free space optional)	FC/APC (free space optional)	FC/APC (free space optional)	FC/APC (free space optional)	FC/APC (free space optional)	
RF Output	SMA	SMA	SMA	SMA	SMA	
Dimensions	62*47*25	62*47*25	62*47*25	62*47*25	62*47*25	mm