

# Si APD Photodetector 500MHz 400-1100nm

## FC/APC



- **Product Description**

The Si APD Photodetector module integrates a low-noise APD detector, a low-noise broadband transimpedance amplifier, an ultra-low noise isolated power supply, a high-voltage power supply, and APD temperature compensation; the isolated power supply ensures that the output signal is not affected by the external power supply; the APD temperature compensation improves the stability of the detection module. The



avalanche photodetector has the characteristics of high gain, high sensitivity, high bandwidth, and low noise

- **Product features**

Low noise 、 High gain 、 Built-in high voltage power supply 、 APD Temperature Compensation 、 Compact structure 、 Built-in low-noise isolated power supply

- **Part Number**

MP-ABD-M-S500-F/S-D

- **Application area**

Fiber Optic Sensing 、 Fiber Optic Communications 、 Laser Distance Measurement、 Spectral measurement、 ns- level optical pulse detection

- **Core parameters**

Wavelength	Bandwidth	Responsivity
400-1100nm	500MHz	25A/W@850nm

## ● General Parameters

### Product Parameters

Material	Si							
Wavelength	400~1100							nm
Bandwidth	100M	200M	300M	400M	500M	1G	2G	Hz
Responsiveness	25	25	25	25	25	25	25	A/W@850 nm
Transimpedance Gain	300K	300K	300K	300K	300K	300K	300K	V/W
Output Impedance	50	50	50	50	50	50	50	$\Omega$
Saturation power	13	13	13	13	13	13	30	$\mu$
NEP	0.18	0.18	0.18	0.18	0.18	0.2	0.2	pW / $\sqrt{\text{Hz}}$
Output coupling mode	DC/AC	DC/AC	DC/AC	DC/AC	DC	AC	AC	
Supply voltage	5	5	5	5	5	12	12	V



<b>Supply current</b>	0.5(ma x)	0.5(ma x)	0.5(ma x)	0.5(ma x)	0.5(ma x)	0.5(ma x)	0.5(ma x)	<b>A</b>
<b>Optical input</b>	<b>FC/APC (free space optical optional)</b>							
<b>RF Output</b>	<b>SMA</b>							
<b>Dimensions</b>	<b>65*50*20</b>							<b>mm</b>