

400-1100nm Si Avalanche Balanced Detector

100MHz



● Product Description

The Si avalanche balance detector 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.

● 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-S-100-F/S-D/A

● Application area

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

● Core parameters

Wavelength	Bandwidth	Responsivity
400-1100nm	100MHz	25A/W@850nm

● General Parameters

Product Parameters

Detector Type	Si							
Wavelength	400~1100							nm
Bandwidth	100M	200M	300M	400M	500M	1G	2G	Hz
Detector Responsivity	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	Ω
NEP	0.18	0.18	0.18	0.18	0.18	0.18	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
Supply current	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)	A
Optical input	FC/APC (free space optical optional)							
RF Output	SMA							
Dimensions	80*90*25							mm