

InGaAs APD Photodetector 100M



- **Product Description**

The avalanche photodetector module integrates a low-noise APD detector, low-noise broadband transimpedance amplifier, ultra-low noise isolated power supply, high-voltage power supply, and APD temperature compensation. The isolated power supply ensures that the output signal is not affected by external power supply interference. APD temperature compensation improves the stability of the detection module. The avalanche photodetector features 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-APD-M-I-100-F/S-D/A

● Application area

Fiber sensing、 Fiber optic communication、 Laser ranging、 Spectral measurement、 Nanosecond-level optical pulse detection

● Core parameters

Wavelength	Bandwidth	Responsivity
800-1700nm	100MHz	9V/W

● General Parameters

Detector type	InGaAs	
Wavelength	800~1700	nm



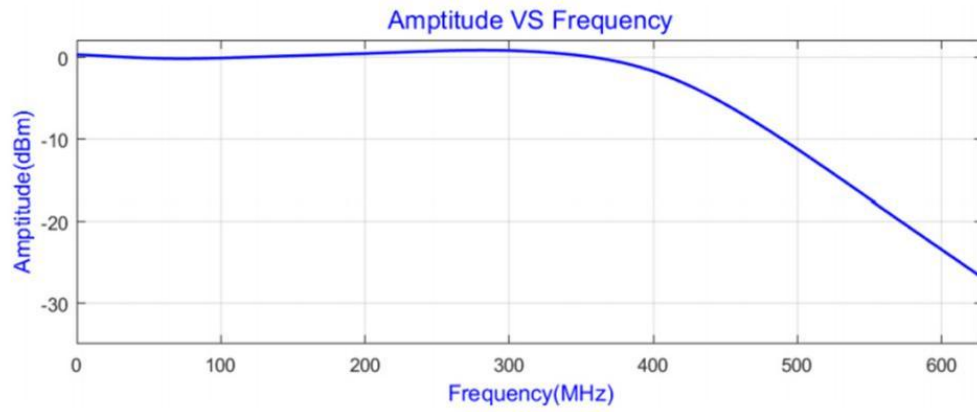
Band width	10 0M	20 0M	30 0M	40 0M	50 0M	600 M	80 0M	1G	1.2 G	1.5 G	2G	2. 5G	5G	Hz
Respo nsivit y	9	9	9	9	9	9	9	9	9	9	9	9	9	V/ W
Transi mped ance gain	30 0K	30 0K	30 0K	10 0K	50 K	50 K	30 0K	30 0K	30 0K	20 0K	15 0K	15 0K	30 K	V/ W
Outpu t impe dance	50	50	50	50	50	50	50	50	50	50	50	50	50	Ω
Satur ation powe r	13	13	13	39	78	78	13	13	13	20	26	26	78	uW
NEP	0.4 6	0.4 6	0.4 6	0.4 6	0.4 6	0.4 6	0.4 6	0. 46	0.4 6	0.4 6	0.4 6	0. 46	0. 46	pW $\sqrt{\text{Hz}}$ (Hz)
Outpu t coupli ng meth od	DC /A C	DC /A C	DC /A C	DC /A C	DC	DC	AC	AC	AC	AC	AC	AC	AC	
Suppl y volta	5	5	5	5	5	5	12	12	12	12	12	12	12	V



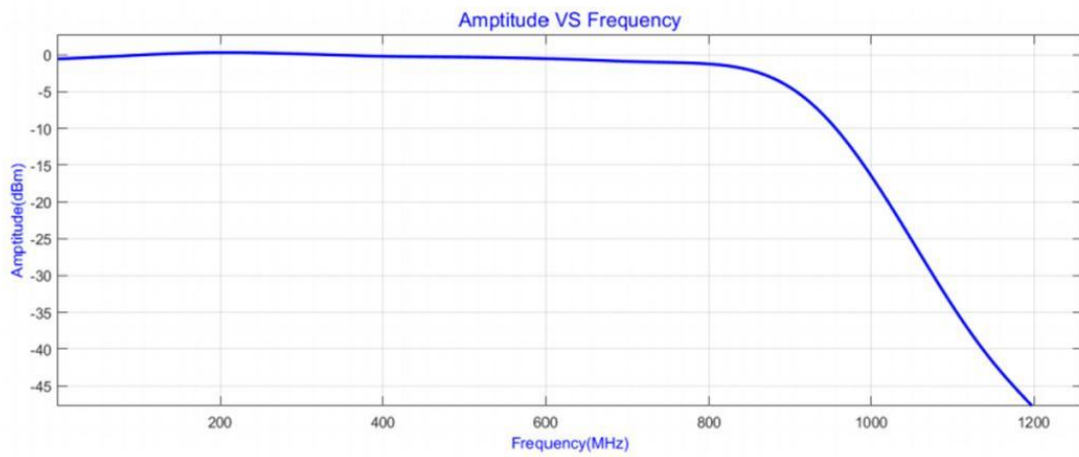
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Supply current	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)
Optical input	FC/APC (Free space optical input optional)											FC/A/PC		
RF output	SMA											SMA		
Dimensions	65*50*20						65*50*25						80*90*25	mm



Test result



400MHz Bandwidth curve



800MHz Bandwidth curve