

## InGaAs APD Photodetector 1.5G



- **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-1500-F/S-A

## ● Application area

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

## ● Core parameters

Wavelength	Bandwidth	Responsivity
800-1700nm	1.5GHz	9V/W

## ● General Parameters

Detector type	InGaAs	
Wavelength	800~1700	nm



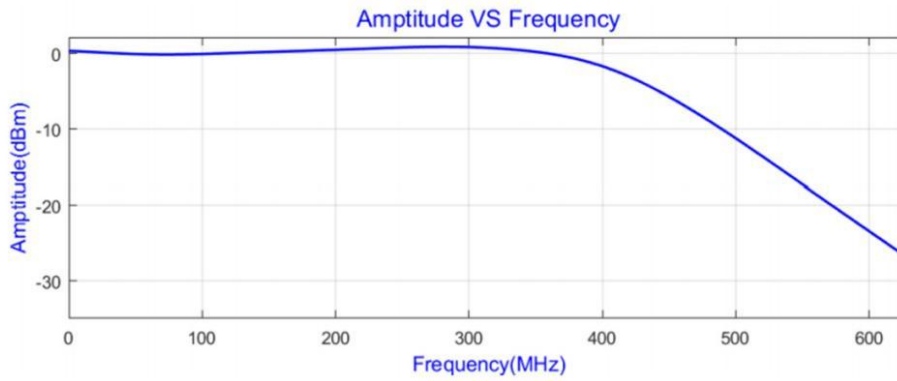
<b>Band width</b>	10 0M	20 0M	30 0M	40 0M	50 0M	600 M	80 0M	1G	1.2 G	1.5 G	2G	2. 5G	5G	Hz
<b>Respo nsivit y</b>	9	9	9	9	9	9	9	9	9	9	9	9	9	V/ W
<b>Transi mped ance gain</b>	30 0K	30 0K	30 0K	10 0K	50 K	50 K	30 0K	30 0K	30 0K	20 0K	15 0K	15 0K	30 K	V/ W
<b>Outpu t impe dance</b>	50	50	50	50	50	50	50	50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



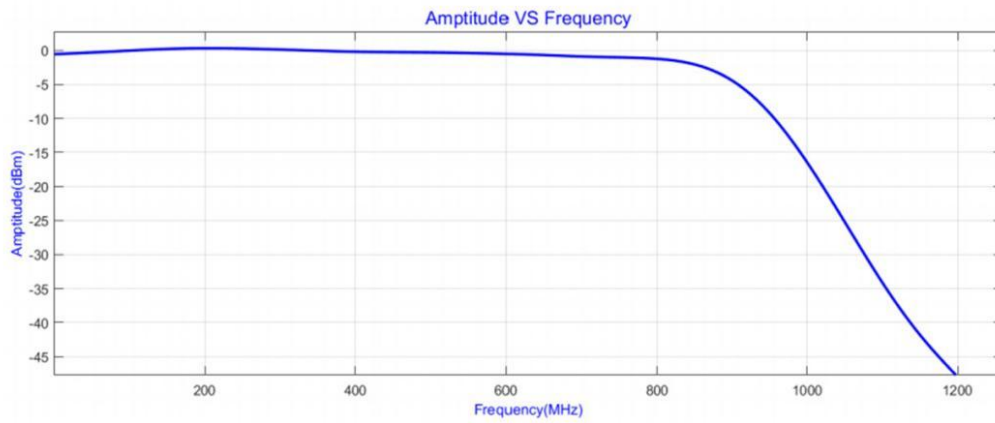
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Supply current	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)	0.5 (max)
Optical input	FC/APC (Free space optical input optional)												FC/A/PC	
RF output	SMA		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



## Test result



400MHz Bandwidth curve



800MHz Bandwidth curve