



## ROF-PT-10G-A

# 10Gbps high-speed light detection module

### Product description

The ROF-PT-10G 10Gb / s high-speed light detection module integrates 10Gb / s PIN detectors and low noise amplifiers, single-mode / multimode fiber-coupled inputs, SMA connector outputs with high gain, high sensitivity, AC coupling output , Flat gain and other characteristics, mainly used in high-speed optical fiber transmission system, ROF and optical fiber sensing systems and other fields.

### Features

- Spectral range : 1100~1650nm
- Data rate up to 10.7Gb/s
- InGaAs/ InP InGaAs / InP planar structure PIN detector
- High sensitivity : -19dBm
- Saturation optical power 1dBm
- Integrate preamplifier
- Compact structure SMA output
- High -speed optical pulse detection
- High -speed optical fiber communication
- Microwave link
- Brillouin diffraction

### Performance parameters

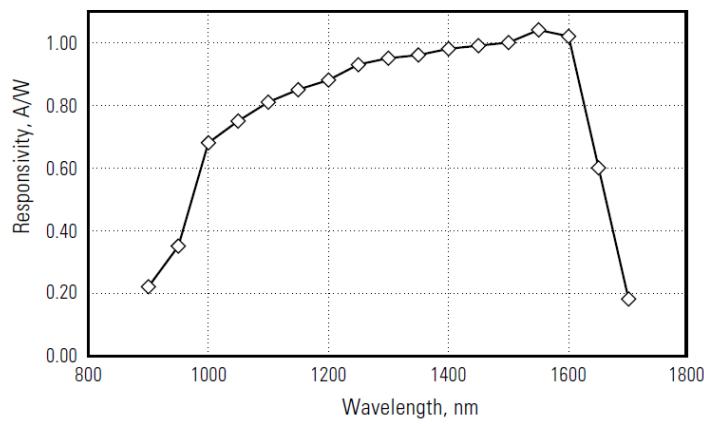
Parameter	Symbol	Unit	Min	Typ	Max	Test condition
Response wavelength		nm	1100		1650	
-3dB bandwidth	BW	GHz	10	11		from 130MHz
Cutoff frequency	f <sub>low</sub>	KHz		24	52	
Dark current	I <sub>d</sub>	nA			10	25°C
Transimpedance	Z <sub>t</sub>		-	2000	-	p-p, f=100MHz
Maximum output swing	V <sub>outpp</sub>	mVp-p	-	330	-	
Output impedance	R <sub>o</sub>		-	50	-	Single-ended signal
Optical return loss	ORL	dB	35			

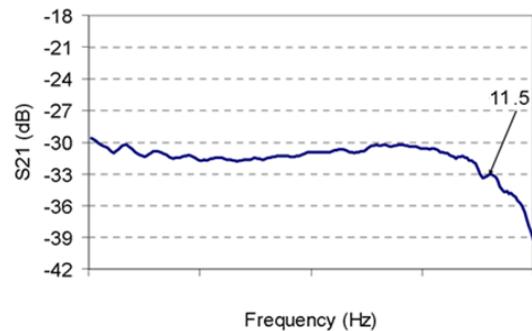
Saturation optical power	Ps	dBm	0	1	-		NRZ, ER=10dB
Sensitivity	S	dBm		-19	-18	25 °C	9.95328Gb/s,PRBS 231-1,BER=10-12
				-18	-17	75 °C	
Responsiveness	R	A/W	0.8	0.9			=1550nm
Operating voltage	Vop	V		15			
Dimensions	LxWxH	mm		100 x 100 x 34			
Input fiber				Single-mode /multi mode fiber			
Optical fiber				FC/PC、FC/APC			

### limit conditions

parameter	Symbol	Unit	Min	Typ	Max
Input optical power	Pin	mW			10
Operating voltage	Vop	V	13.5		16.5
Operating temperature	Top	°C	-10		60
Storage temperature	Tst	°C	-40		85
Humidity	RH	%	5		90

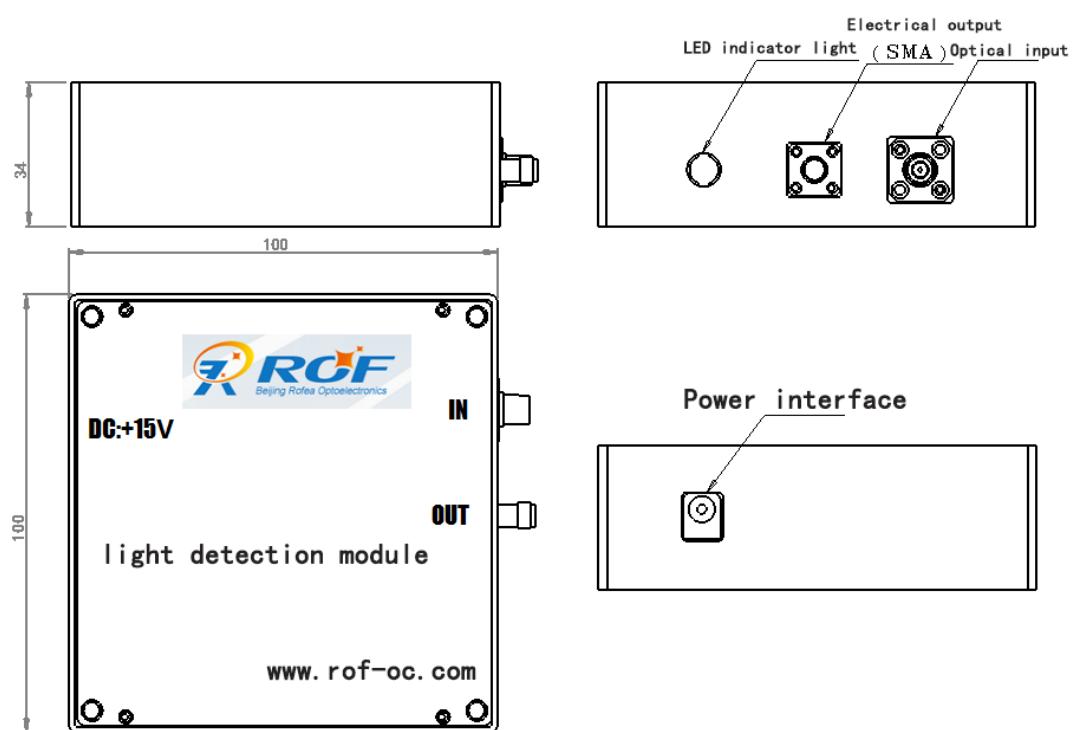
### Characteristic curve





frequency response

### Dimensions (mm)



### Ordering information

ROF	PT	XX	XX	XX
	Detection module type: PT ----PIN -TIA	Operating rate: 10---10 Gb/s	Pigtail fiber type SM----single-mode fiber MM ----multimode fiber	Connector type FP ---FC/PC FA ---FC/APC

\*please contact our seller if you have special requirements