

ROF-PR-3G/6G series

Analog photoelectric receiver

ROF-PR-3G/6G series The analog photoelectric receiver has a wide band and flat photoelectric response characteristics from 300Hz to 3GHz or 10K to 6GHz, and a high photoelectric conversion gain, which is a very cost-effective photoelectric receiver. It is very suitable for application in optical pulse signal detection, ultra-wideband analog optical signal receiving and other system fields.

Feature

- Operating wavelength: 1100-1650nm
- Operating bandwidth: 300Hz~3GHz, 10KHz~6GHz
- Low noise, high gain

Application

- Optical pulse signal detection
- Broadband analog optical signal reception

Parameters



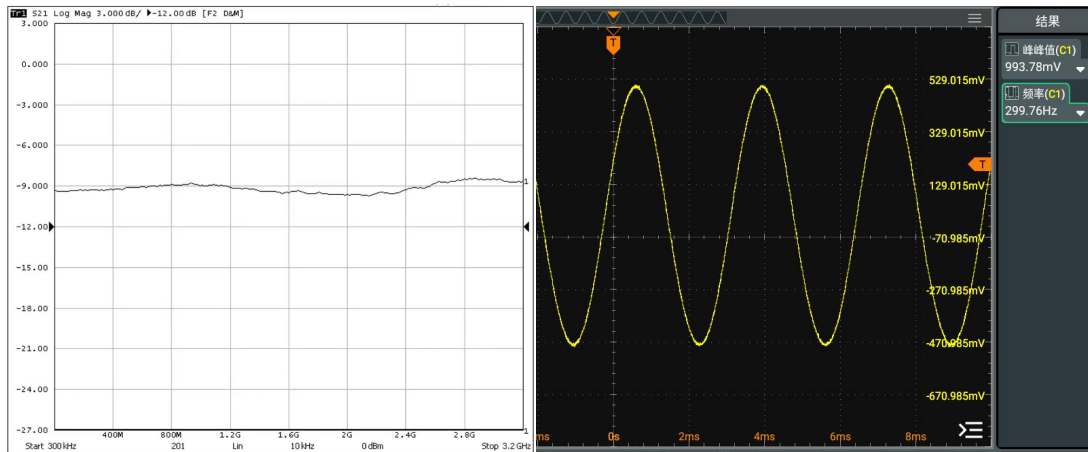
Parameter	Symbol	Unit	Min	Typ	Max	remark
Operating wavelength	λ	nm	900	1310&1550	1650	
-3dB bandwidth	BW	Hz	300		3G	KG-PR-3G
			10K		6GHz	KG-PR-6G
In-band flatness	f_L	dB		± 1	± 1.5	
Minimum input optical power	Pmin	μ W		5		$\lambda=1550$ nm
Maximum input optical power	Pmax	mW		6		$\lambda=1550$ nm
Conversion gain	G	V/W	800	900		高阻态下测试
Maximum output voltage swing	Vout	Vpp	5	5.5		高阻态下测试
Standing wave	S ₂₂	dB		-10		
Charging voltage	P	V	DC 5			
Input connector			FC / APC			
Output connector			SMA(f)			
Output impedance	Z	Ω	50 Ω			
Output coupling mode			AC 耦合			
Dimensions (L × W × H)		mm	49.5*22*15mm			

Limit Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Input optical power range	Pin	mW			10
Operating temperature	Top	°C	5		50
Storage temperature	Tst	°C	-40		85

Characteristic Curve

Test conditions: indoor, temperature $23 \pm 5^\circ\text{C}$



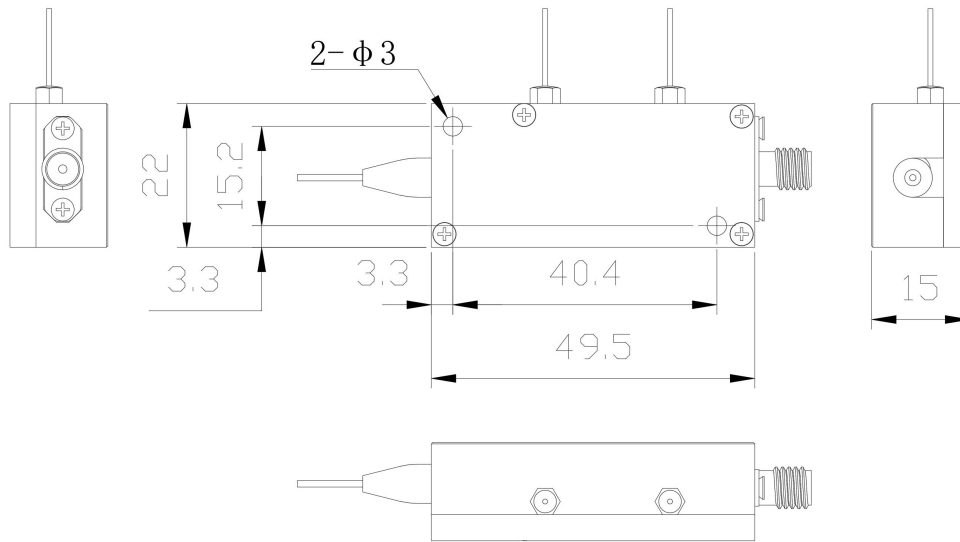
(1) Frequency response curve

(2) Low frequency (300Hz) signal response

(1) The response bandwidth of the test front-end (transmitter) should cover 300Hz~3GHz, and the flatness is good.

(2) The frequency response curve is measured by the vector network analyzer. Limited by the low frequency cutoff of the network analyzer, the actual output waveform of the 300Hz low frequency signal is tested with an oscilloscope, and it is proved that the receiver works normally at 300Hz frequency.

Structural dimension (mm)



Ordering information

ROF-TDS	B	C
Analog photoelectric receiver	3dB bandwidth: 3G---3GHz 6G---6GHz	Optical fiber connector: FA---FC/APC FP---FC/PC SP---Customer customization