



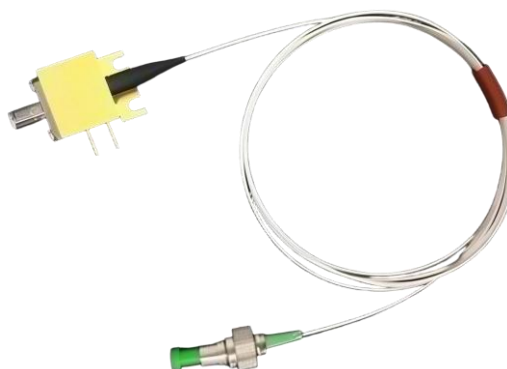
R-PD-70G-A-SM-FA-T

Description

R-PD-70G-A-SM-FA-T is a PIN based ultra wideband photodetector that achieves photoelectric conversion function. The port has built-in bias-T and $50\ \Omega$ impedance matching, with a typical bandwidth of 3 dB at 67 GHz, an effective bandwidth of ≥ 70 GHz, and a responsivity of ≥ 0.6 A/W. This product is suitable for high-speed instrument detection, microwave photon link and other technical fields.

Feature

- Ultra high bandwidth
- High light responsivity
- Low dark current
- Low port standing wave



Parameter

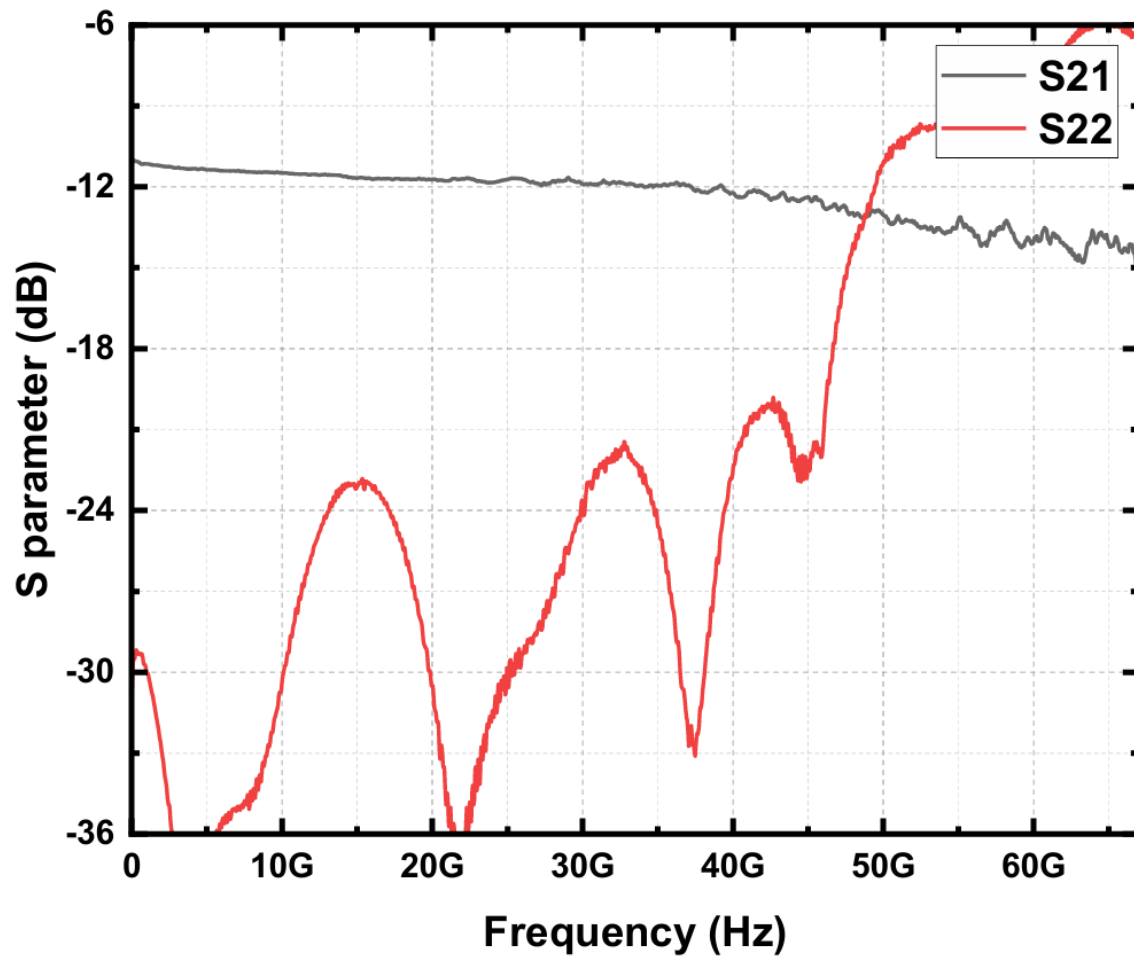
Parameter	Sym	Test conditions	Min	Typ	Max	Unit
Operating Wavelength	λ		1260	1550	1570	nm
Responsiveness	R	$P_{in}=0\text{dBm}, V_r=+2\text{ V}, \lambda=1550\text{ nm}$		0.6		A/W
Dark current	I_d	$V_r=+2\text{ V}$		20	60	nA
3 dB bandwidth	BW	$P_{in}=0\text{dBm}, V_r=+2\text{ V}, \lambda=1550\text{ nm}$	60	67		GHz
RF reflection loss	S22	$P_{in}=0\text{dBm}, V_r=+2\text{ V}, \text{within the scope of } 10\text{M-}67\text{GHz}$		-10	-8	dB
Saturated optical power	P_{sat}	$V_r=+2\text{ V}, \lambda=1550\text{nm}$		7		dBm

Limiting conditions

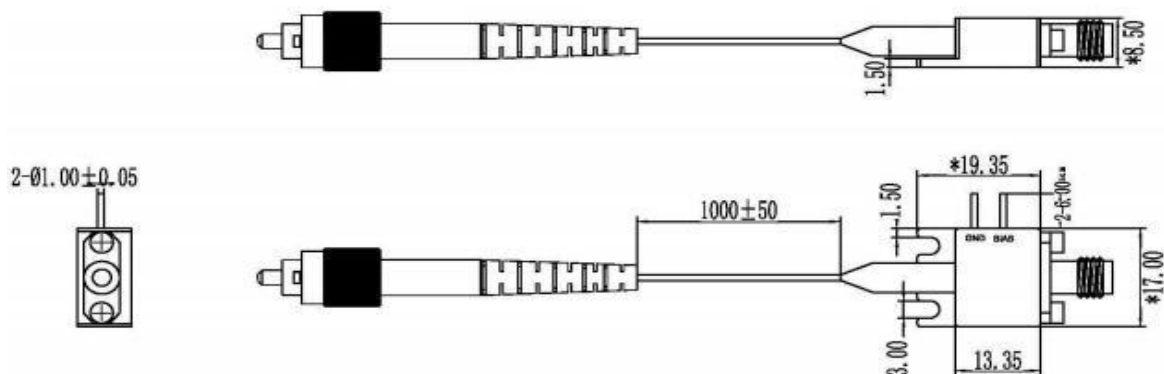
Parameter name	Sym	Rated value	Unit
Optical power	P_s	10	dBm
Positive bias voltage	V_r	5	V
Operating Temperature	T_{op}	-40 ~ +70	°C
Storage temperature	T_{stg}	-55 ~ +85	°C



Characteristic curve



Size



PIN	Functional Description
BIAS	+1~+3V (recommended+2V)
GND	grounding
Fiber optic interface	SMF fiber/PMF fiber, FC/APC connector, Pin ≤ 10dBm (recommended ≤ 0-7dBm)
RF interface	1.85mm,Female



Ordering

R	PD	70G	A	XX	XX	X
	Photodetector	-3dBbandwidth 70---70 GHz	Operating wavelength : 1260~1570 nm	SM---- single-mode fiber	Connector type FP ---FC/PC FA ---FC/APC	Package: T---Tube