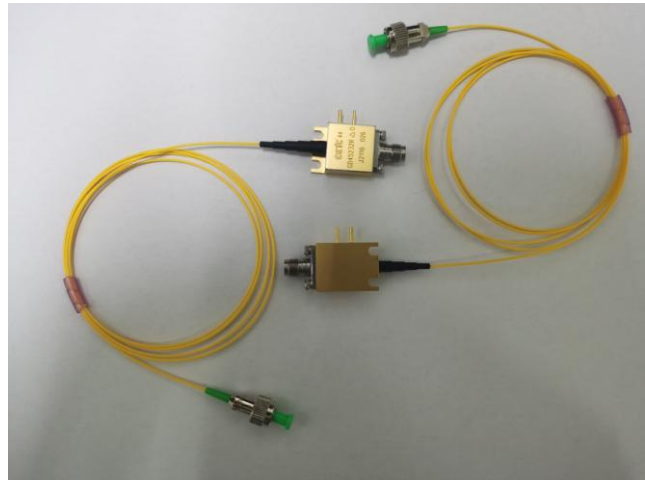


ROF-PD1570G High Speed InGaAs Photodetector

Features:

- Wide Bandwidth
- Internal Bias-T
- DC Coupled
- Hermetically sealed, V connector



Applications:

- High Speed Optical-fiber Communication
- Microwave Photonic Link
- High speed Test and Measurement

Absolute Maximum Rating (TC = 22±3°C)

Parameter	Sym.	Rating	Unit
Storage temperature range	T _{STG}	-45 ~ +85	°C
Operating case temperature range	T _C	-40 ~ +70	°C
Bias Voltage	V _R	7	V
Optical Input Power	P _{in}	13	dBm
Lead soldering temperature	T _P	260 (10s)	°C

Electrical/Optical Characteristics (TC = 22±3°C)

Parameter	Sym	Test Condition	Parameter values			Unit
			min	typ	maX	
Wavelength Range	λ	—	1000	—	1650	nm
Responsivity	R_e	$V_R = 5V, \lambda = 1.55\mu m, P_{in} = 0dBm$	0.5	0.6	—	A/W
3dB bandwidth	f_{3dB}	$V_R = 5V, \lambda = 1.55\mu m, P_{in} = 0dBm,$ $RF_{in} = 0dBm, f_{strat} = 70kHz$	68	70	—	GHz
Amplitude Flatness	F	$V_R = 5V, \lambda = 1.55\mu m, P_{in} = 0dBm,$ Frequency Range: 70kHz~70GHz,	—	—	±1.5	dB
Saturation Optical Power	P_s	$V_R = 5V, \lambda = 1.55\mu m, RF_{in} = 0dBm,$ Frequency: f=35GHz	9	10	—	dBm
RF Reflection Loss	S_{22}	$V_R = 5V, \lambda = 1.55\mu m, P_{in} = 0dBm,$ Frequency Range: 70kHz~50GHz,	—	-8.0	-6.0	dB
Polarization Dependent Loss	PDL	$\lambda = 1.55\mu m, V_R = 5V$	—	0.02	0.05	dB
Dark Current	I_D	$V_R = 5V$	—	1.0	10.0	nA

Typical Response Curves :

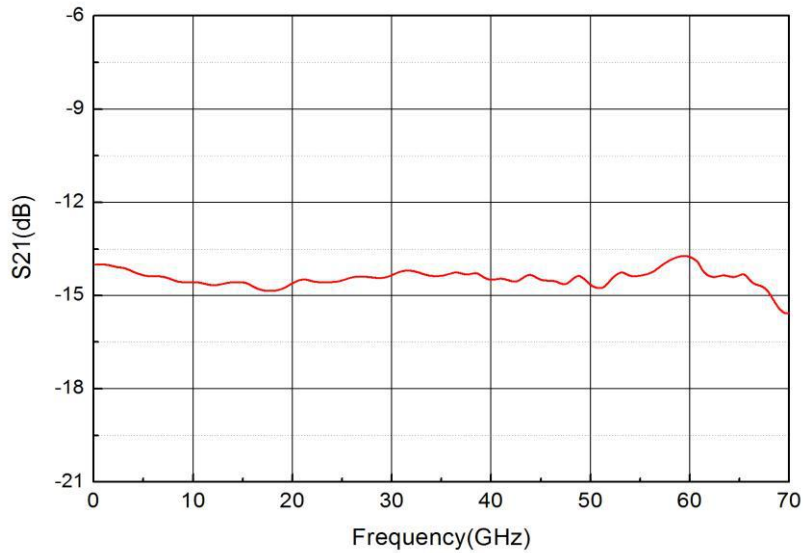


Fig.1 Photodetector Frequency Response Curve

(Note:the detector frequency response curve include the frequency response of laser and modulator)

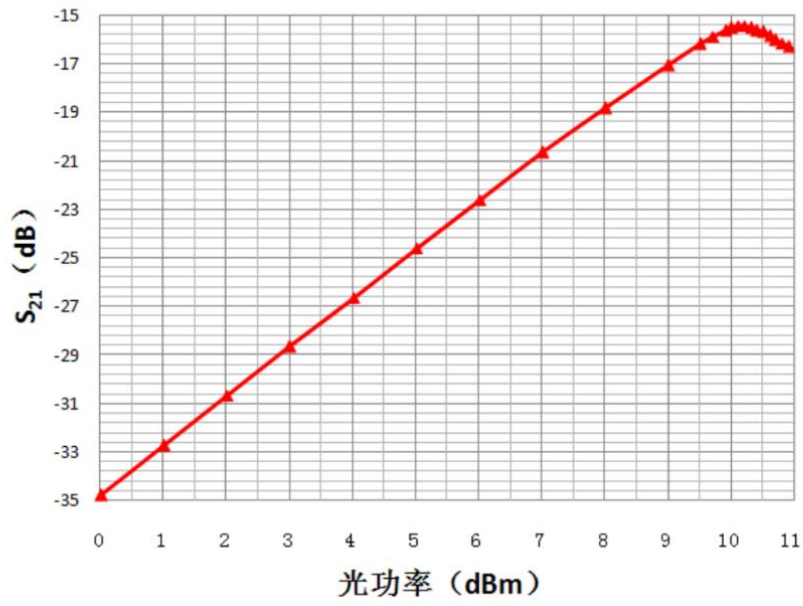


Fig.2 Photodetector Saturation Input Optical Power Curve

The packages (Unit: mm)

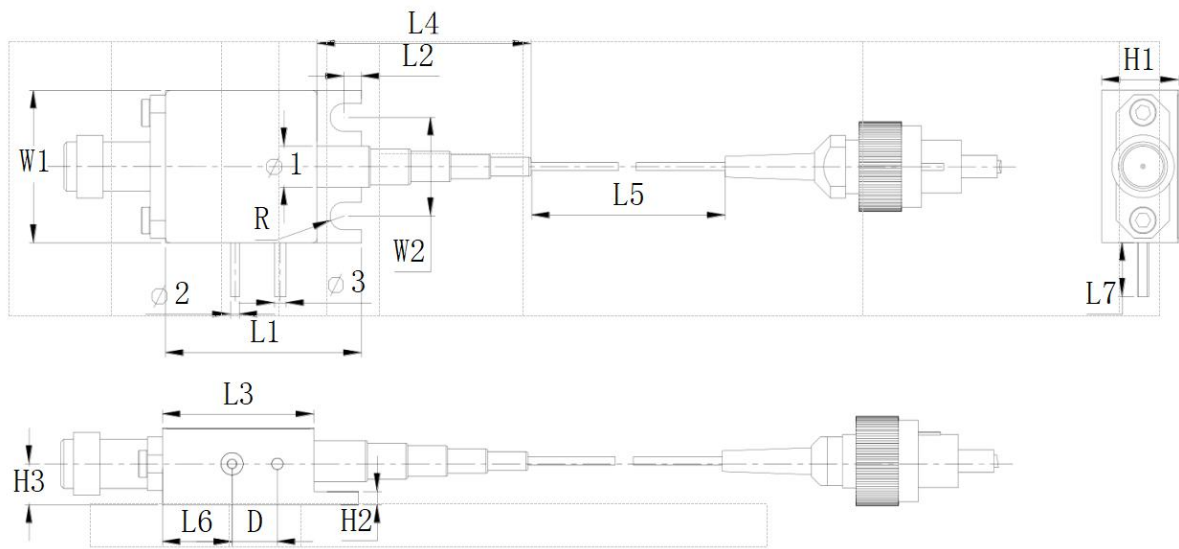


Fig.3 Configuration

Overall dimensions Unit: mm

Dimension symbol	L1	H1	W1	L2	H2	W2	L3	L4	L5
Maximum value	22.1	8.7	17.1	2.1	1.6	11.2	17.2	25.0	—
Nominal value	22.0	8.6	17.0	2.0	1.5	11.0	17.0	—	—
Minimum value	21.9	8.5	16.9	1.9	1.4	10.8	16.8	—	1000.0
Dimension symbol	L6	L7	D	R	Φ1	Φ2	Φ3	H3	
Maximum value	7.9	6.1	5.23	1.65	5.0	1.05	1.35	4.7	
Nominal value	7.8	6.0	5.08	1.55	—	1.00	1.30	4.6	
Minimum value	7.7	5.9	4.93	1.45	—	0.95	1.25	4.5	

Product Information :

Fiber	9/125 μm Single-mode 9/125 μm fiber pigtail
Fiber Connector	FC/APC
RF Connector	Female V-Connector

Qualification Information :

Photodetector module have passed reliability assurance requirements as specified by GJB 8120-2013.

Precautions :

- 1.The fiber bending radius no less than 20mm for avoiding fiber damaged.
- 2.Be sure the fiber coupling facet is clean before connecting it to opto-circuit.
- 3.The suitable ESD protection is required in storage, transportation and using.
- 4.The suitable protection against damage is required in testing, packaging, transportation and using.