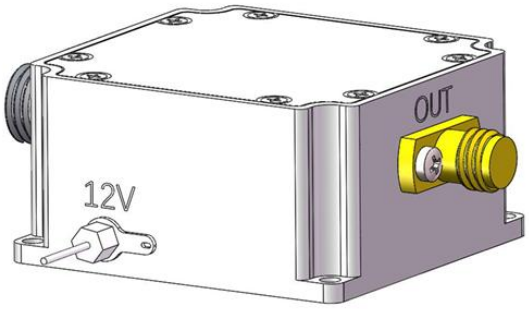
PD11 AC Coupled High-Speed Photodetector

Overview

The PD11 is a photodetector with an integrated amplifier circuit designed for use with FC-terminated optical cables in optical systems. The device incorporates a photodiode, a transimpedance amplifier, and an RF connector, all housed in an aluminum enclosure. The FC flange facilitates coupling with fiber-optic light sources, while the output uses an SMA connector to minimize size and maximize frequency response, with a bandwidth of 1 GHz.

Features

- Wavelength range: 1000–1700 nm
- Compact housing
- SMA output connector
- FC fiber input connector



Applications

- Detection of weak optical signals
- Detection of fast laser pulses
- Detection of heterodyne laser beat signals

Specifications

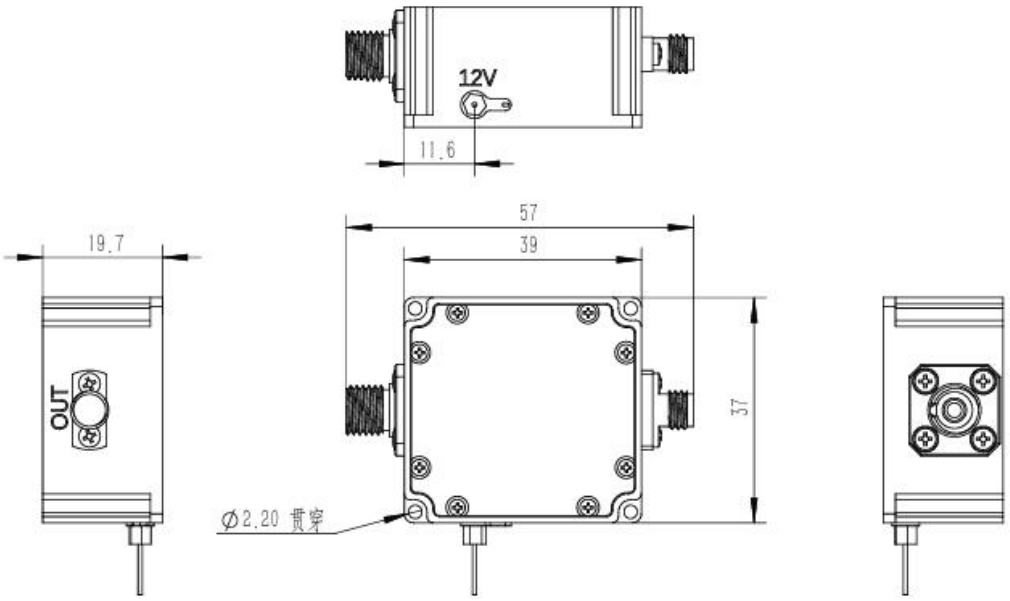
Model	**PD11C-1G**	
Material	InGaAs	
Wavelength Range	1000-1700nm	
Input Interface	FC Flange	
Sensitivity	0.9A/W @1550nm	
Bandwidth[a]	400k-1GHz	
Rise Time[a]	400ps	
Gain	3kV/A	
Saturation Power	252uw	
Noise Voltage[a]	28mVpp	
Equivalent Noise Power	58.2pW/ √ Hz	

General Detector Parameters	**Typical value**
Maximum Output Amplitude [a]	+0.7V
Operating Voltage	12V
Operating Current	<200mA
Output Impedance	50Ω
Output Coupling Mode	AC
Output Connector	SMA female
Operating Temperature	-20~65℃
Storage Temperature	-40~85℃

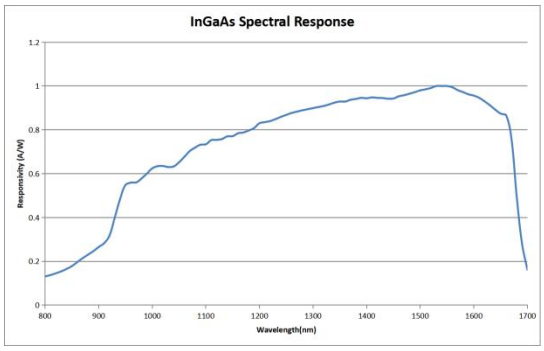
Note:

a For a 50Ω load

MechanicalDimensions



Response Curve



Note: The response curve shows typical values and is for reference only.

Packing List

NO	Item Name	Quantity	Unit	Remarks
1	Photoelectric Detector	1	each	
2	12V Power Supply	1	each	
3	SMA-to-BNC RF Cable	1	each	