InGaAS APD Photodiode Module



Description

The APD modules enable very low light levels to be detected quickly and simply in a variety of applications such as laser radar, rangefinding, data transfer or biomedical analysis.

The APD modules are based on low-noise avalanche photodiodes made of either silicon or InGaAs with a built-in pre-amplifier and high voltage supply. A temperature compensation function allows the APD to be operated at constant gain across a wide operating temperature range.

Features

- Top illumination planar APD
- Low Dark Current
- High Responsivity
- High Reliability
- High Gain
- Built In High Voltage Supply
- APD Temperature Control
- Built in low noise isolation power supply

Application

- Monitoring the output of Q-switched lasers
- Monitoring the output of mode-locked lasers
- Monitoring the output of externally modulated CW lasers
- Time domain and frequency response measurements

Specifications

Part Number	AP-50M	AP-100M	AP-200M	AP-350M	AP-800M	AP-1.6G	Unit
Detector Type	InGaAs						
Wavelength	800~1700	800~1700	800~1700	800~1700	800~1700	800~1700	nm
Bandwidth	AC-50M	AC-100M	AC-200M	AC-350M	AC-800M	AC-1.6G	HZ
Responsivity	9	9	9	9	9	9	A/W
Transimpedance gain	300k	300k	50k	50k	50k	300k	V/A
Output impedance	50	50	50	50	50	50	Ω
Saturation power	4.2	4.2	4.2	4.2	4.2	4.2	uW
NEP	0.46	0.46	0.46	0.46	0.46	0.46	pW/√(Hz)
Output Coupling	DC/AC	DC/AC	DC/AC	DC/AC	AC	AC	
Voltage	5	5	5	5	12	12	V
Current	3(max)	3(max)	3(max)	3(max)	3(max)	3(max)	A
Optic input	FC/APC	FC/APC	FC/APC	FC/APC	FC/APC	FC/APC	
RF Output	SMA	SMA	SMA	SMA	SMA	SMA	
Dimension	100*100*25	100*100*25	100*100*25	100*100*25	100*100*25	100*100*25	mm