

ROF-QPD series four-quadrant photodetector module

ROF-QPD series four-quadrant photodetector module adopts imported four-quadrant photodiodes and is specially designed with drive circuits and low-noise amplification circuits. It is mainly used for beam position measurement and precise Angle measurement, with response wavelengths covering 400-1700nm (400-1100nm / 800-1700nm). It is also widely used in fields such as laser collimation/laser communication and laser guidance.

Feature

- Spectral range: 400~1700nm
- PIN&APD detector
- Quick response
- Compact structure
- Integrated with low-noise amplifier and boost circuit

Application

- Angle measurement
- Beam aiming
- Space optical communication



Parameters

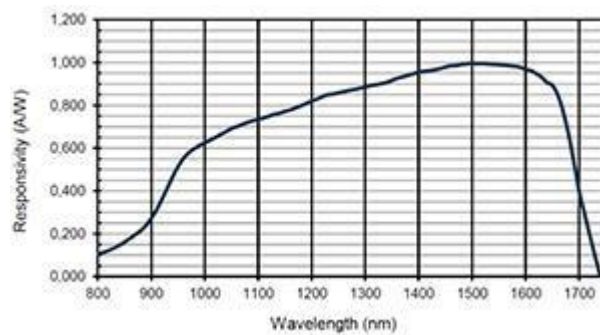
Parameters		Symbol	Unit	型号	
				R-QPD-A	R-QPD-B
Detector Type				Si/APD	InGaAs/PIN
Response wavelength		λ	nm	400-1100	800-1700
Diameter of photosensitive surface		Φ	mm	4	1.5
Gap			um	110	45
Responsiveness		R	A/W	67@960nm, M=100 36@1064nm, M=100	0.9@1550nm 0.6@1060nm
Alignment port	Bandwidth	BW	Hz	>20k	>20M
	Conversion gain	G	V/W	10^6 @900nm	10^4 @1060nm
	Rise time	T	-	17us	18ns
	Saturated optical power	-	-	25uW	5mW
Communication port	Speed	-	Mbps	40	10
	Sensitivity	-	dBm	-45	-35
	Signal format	-	-	LV TTL	LV TTL
Output electrical signal interface				J30J DB15	
Coupling				DC	AC
Output swing			Vpp	2.5	3.7
Noise voltage		N	mV	<1	<30
Power supply				DC12V	



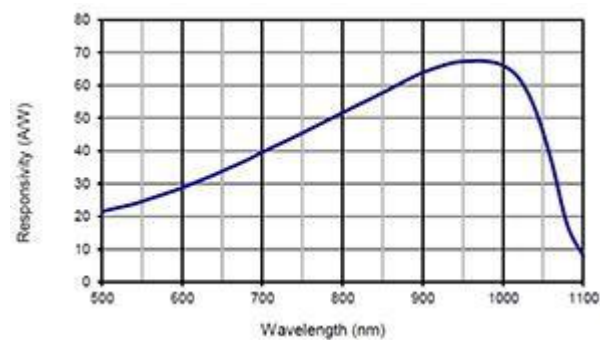
limiting conditions

Parameters	Symbol	Unit	Min	Typ	Max
Operation voltage	Vop	V	11.5		12.5
Operation temperature	Top	°C	-20		65
Storage temperature	Tst	°C	-40		85
Humidity	RH	%	5		90

Response curve

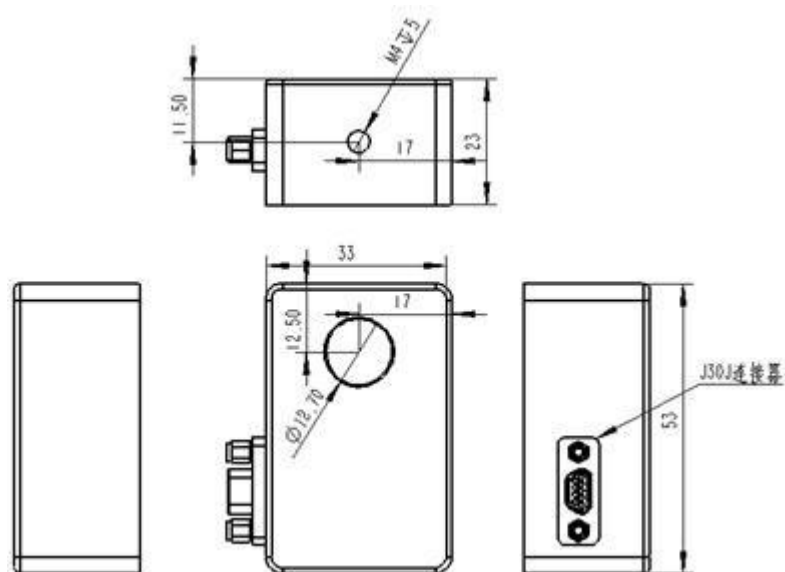


PIN



APD

Package Size(mm)



Order information

ROF	QPD	X	X
	Four-quadrant photodetector	Detector type: APD PIN	Response wavelength: A-400-1100nm B-800-1700nm