

Uni-Directional Integrated Photo Detector UD-IPD

Description

Miniature Uni-Directional Integrated Photo Detector, UD-IPD, is based on a key technology that integrates thin film tap filter and photodiode. The unidirectional feature allows power monitoring from input port only. The device is integrated by Browave alignment technology and strategy partner's high sensitivity and reliable mini TO-CAN photodiode. The UD-IPD provides a cost-effective and high performance solution for power monitoring and amplifier system.



Features

- ▶ Low insertion loss & PDL
- ▶ Superior response & low dark current
- ▶ High directivity
- ▶ High reliability

Application

- ▶ DWDM channel monitoring
- ▶ Optical amplifier (EDFA, Raman)
- ▶ VOA & V-Mux
- ▶ Multi channels OADM

Specification

Items	Parameter	Unit		2%	5%
Normal Information	Operating Wavelength Range	nm		C-Band	C-Band
	Input Power Range	dBm		-13 ~ +23	~-17 ~ +21
Optical Performance	Insertion Loss	Max.	dB	0.5	0.6
	Polarization Dependent Loss	Max.	dB	0.1	0.1
	Wavelength Dependent Loss	Max.	dB	0.2	0.3
	Temperature Dependent Loss	Max.	dB	0.2	
	Return Loss	Min.	dB	45	
Optical/ Electrical Performance	Responsivity	mA/W		14~30	30~70
	Polarization Dependent Responsivity	Max.	dB	0.15	
	Wavelength Dependent Responsivity	Max.	dB	0.3	
	Temperature Dependent Responsivity	Max.	dB	0.3	
	Directivity @25°C, Pin>0 dBm.	Min.	dB	33	
	Responsivity Linearity	%		±5%	
Others	Dark current @ 70°C	Max.	nA	5	
	Bandwidth	Min.	MHz	600	
	Capacitance	Max.	pF	10	
	Tensile Load	Max.	N	5	
	Reverse Bias	Max.	V	10	10
	Operating Temperature	°C		0 ~ +70	
	Storage Temperature Range	°C		-40 ~ +85	
	Fiber Type	-		250um bare fiber	
	Package Dimension (DxL)	mm		3.2 x 23	3.2 x 23