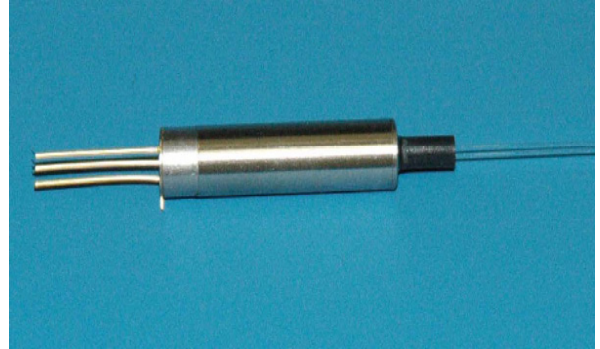


Integrated TAP Detector (TAPD) Unidirectional

Applications:

EDFA Power Monitoring/Control
DWDM Channel Monitoring



Features:

Low Insertion Loss

Excellent Directivity

Superior Thermal Stability

Low Wavelength Dependent Loss

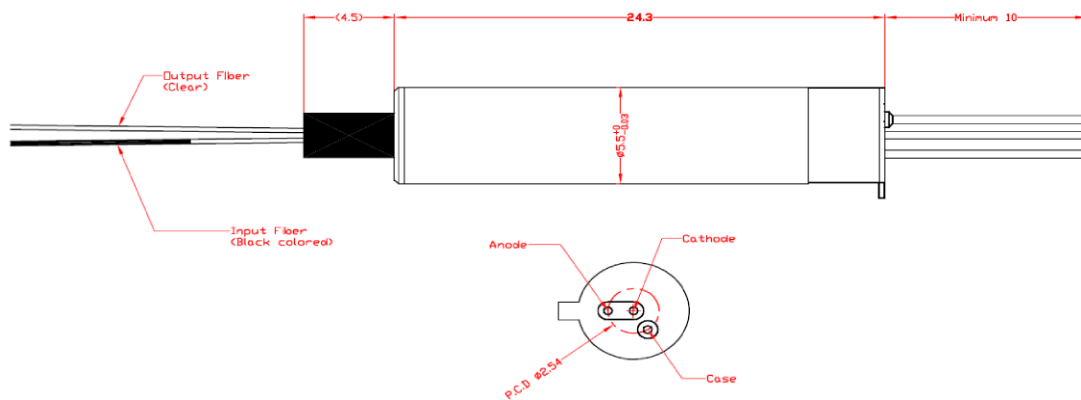
Low Dark Current

Telcordia GR-468-CORE Compliant

Description:

Go!Foton's integrated Tap Detector(TAPD) series combines an optical coupler, based on NSG's filter-on-lens technology, with Go!Foton's proprietary PIN photodiode to create a single channel optical power monitor. The Unidirectional TAPD is designed specifically for EDFA applications. With this design, the reflected light from the output fiber does not couple into the detector. The hermetically sealed InGaAs photo detector has a low dark current and a flat and rapid power response across a wide wavelength range.

Dimensions:



Specifications:

C Band	Tap Ratio		0.5%	1%	2%	3%	5%	10%
	Wavelength Range	nm	1520 ~ 1570					
	Insertion Loss	dB	<0.5	<0.5	<0.5	<0.5	<0.6	<0.8
	Wavelength Flatness	dB	<0.1					
	Temperature Dependent Loss	dB	<0.15					
	Polarization Dependent Loss	dB	<0.05					
	Maximum Optical Return Loss	dB	>50					
	PD Bias Voltage, V_R	V	5					
	Maximum Optical Power Handling	dBm	26	23	20	18	16	13
	Responsivity	max	8.5	15	26	40	64	145
		min	4	8	16	26	44	70
	Wavelength Dependent Responsivity	dB	< 0.3					
	Temperature Dependent Responsivity	dB	<0.2					
	Polarization Dependent Responsivity	dB	<0.1					

L Band	Tap Ratio		0.5%	1%	2%	3%	5%	10%
	Wavelength Range	nm	1570 ~ 1610					
	Insertion Loss	dB	<0.5	<0.5	<0.5	<0.5	<0.6	<0.8
	Wavelength Flatness	dB	<0.1					
	Temperature Dependent Loss	dB	<0.15					
	Polarization Dependent Loss	dB	<0.05					
	Maximum Optical Return Loss	dB	>50					
	PD Bias Voltage, V_R	V	5					
	Maximum Optical Power Handling	dBm	26	23	20	18	16	13
	Responsivity	max	8.5	15	26	40	64	145
		min	4	8	16	26	44	70
	Wavelength Dependent Responsivity	dB	< 0.4					
	Temperature Dependent Responsivity	dB	< 0.4					
	Polarization Dependent Responsivity	dB	< 0.1					

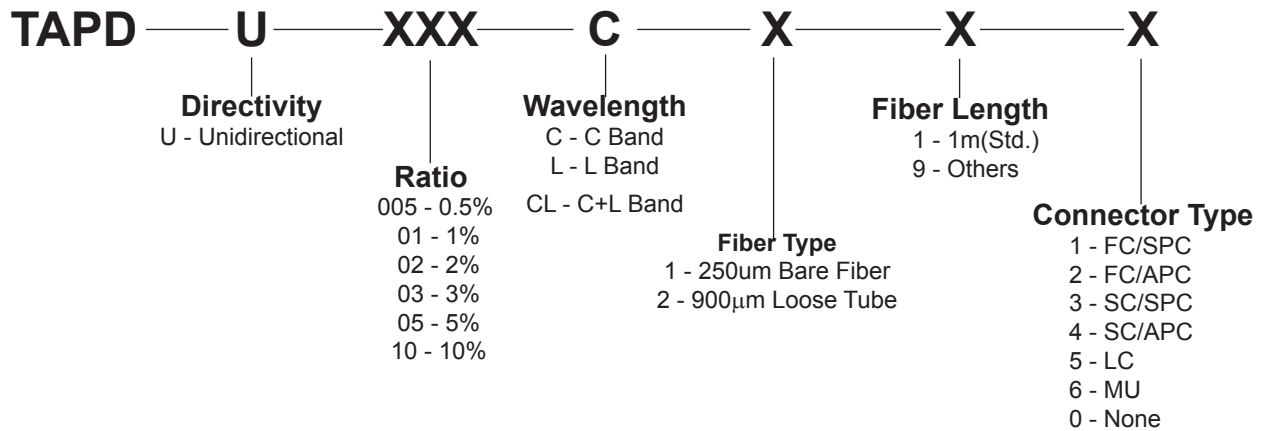
C+L Band	Tap Ratio		0.5%	1%	2%	3%	5%	10%
	Wavelength Range	nm	1520 ~ 1610					
	Insertion Loss	dB	<0.5	<0.5	<0.5	<0.5	<0.6	<0.8
	Wavelength Flatness	dB	<0.15					
	Temperature Dependent Loss	dB	<0.15					
	Polarization Dependent Loss	dB	<0.05					
	Maximum Optical Return Loss	dB	>50					
	PD Bias Voltage, V_R	V	5					
	Maximum Optical Power Handling	dBm	26	23	20	18	16	13
	Responsivity	max	8.5	15	26	40	64	145
		min	4	8	16	26	44	70
	Wavelength Dependent Responsivity	dB	< 0.45					
	Temperature Dependent Responsivity	dB	<0.45					
	Polarization Dependent Responsivity	dB	<0.1					

All specifications are without fiber connectors.

Common	Operating Temperature	°C	0 ~ +75
	Storage Temperature	°C	-40 ~ +85
	Directivity	dB	> 25
	Dark Current 25 °C	nA	<0.5 (@RT), < 2(Top)
	PD Cut-Off Frequency, $R_L=50\Omega$, -3dB	GHz	1(Typical)
	Linearity	%	+/- 10
	Fiber Type	mm	SMF-28e or equivalent
	Fiber Length	m	> 1
	Package Size Standard Pacakge	mm	(ϕ)5.5 x (L)24.3
	Soldering Temperature	°C	250 (<10 sec)

Document # GF-S-MKT-TAPU-REV10-09-09

Ordering Information:



Example: TAPD - U - 05 - C - 1 - 1 - 4

TAP Detector, Unidirectional, 5% Ratio, C Band Wavelength,
SMF-28e 250um Bare Fiber, 1m with SC/APC Connector