



Unidirectional Integrated Tap Photodiode (UTPD Series)

Rev 11D

Description

The Unidirectional Integrated Tap Photodiode (UTPD) integrates the functionality of an optical coupler and a photodiode for optical network's power detection. The unidirectional feature allows the PD to respond to power from input port only. It can be applied for channel power monitoring in DWDM system, in-line optical network switching protection monitoring (OLP), reconfigurable optical add/drop multiplexers (ROADM), and gain/attenuation monitoring in EDFAs, network's power detection, etc.

Key Features

- High Directivity
- Unidirectional
- Accurate Tap Ratio

Applications

- DWDM System
- Optical Sensing System

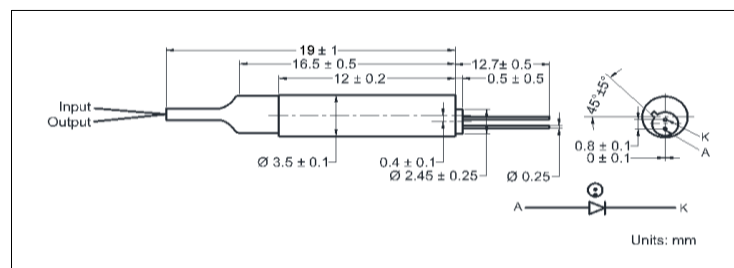
Specifications

Parameter		Unit	Value
Operating Wavelength Range (λ_{op})		nm	1520 - 1610
Max. Insertion Loss	1%	dB	0.4
	2%	dB	0.5
	5%	dB	0.6
Max. Wavelength Flatness		dB	0.15
Max. Polarization Dependent Loss		dB	0.05
Min. Return Loss		dB	45
Responsivity	1%	mA/W	7 - 15
	2%	mA/W	14 - 25
	5%	mA/W	35 - 65
Min. Directivity From Output to PD		dB	25
Max. Dark Current (@ 70 °C, - 5 V Bias)		nA	2
Max. Power on Photodetector		mW	10
Fiber Type		-	SMF-28 Fiber
Operating Temperature		°C	0 to + 70
Storage Temperature		°C	- 40 to + 85
Soldering Temperature (Over 2 mm From Head, Less than 5s)		°C	≤ 260

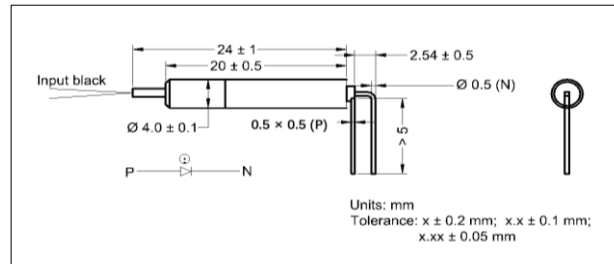
¹IL is 0.3 dB higher, RL is 5 dB lower for each connector added.

Package Dimensions

Parallel Pin Package



Side Pin Package



Ordering Information

UTPD-①-②②-③③-④-⑤⑤-⑥-⑦

①: Center Wavelength

E - 1520 - 1610 nm

②②: Tap Ratio

01 - 1%

02 - 2%

05 - 5%

③③: Bandwidth

20 - 2.0 GHz

④: Connector Type

1 - FC/UPC 4 - SC/APC

2 - FC/APC N - None

3 - SC/UPC S - Specify

⑤⑤: Fiber Jacket

B - 250 μ m Bare Fiber

⑥: Fiber Length

1 - 1.0 m

S - Specify

⑦: Package Type

1 - Parallel Pin Package

2 - Side Pin Package