



Integrated Tap Photodiode (TAPD)

Rev 11C

The Integrated Tap Photodiode (TAPD) integrates the functionality of an optical coupler and a photodiode for optical network's power detection. It applies for channel power monitoring in DWDM system, in-line optical network switching protection monitoring (OLP), re-configurable optical add/drop multiplexer (OADM), and gain/attenuation monitoring in EDFA, etc.

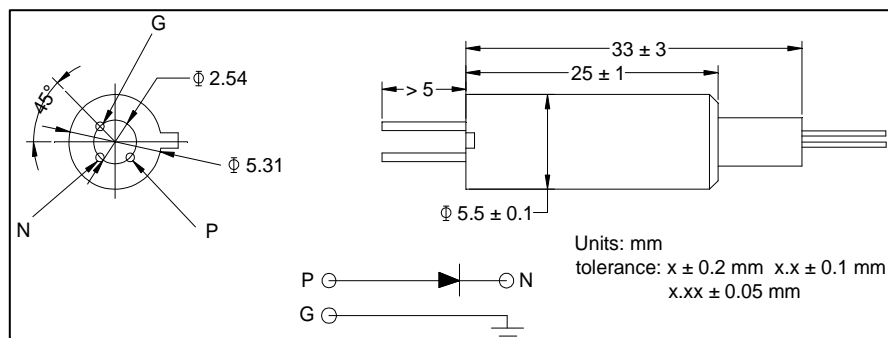
Specifications

Parameter	Unit	Value
Center Wavelength (λ_c)	nm	1310 1550
Operating Wavelength Range (λ_{op})	nm	$\lambda_c \pm 50$
Max. Insertion Loss	1%	0.4
	2%	0.5
	5%	0.6
	10%	0.9
Wavelength Flatness	dB	≤ 0.2
Max. Polarization Dependent Loss	dB	0.05
Min. Return Loss	dB	45
Responsivity	1%	mA/W 6 - 14 7 - 15
	2%	mA/W 12 - 23 14 - 25
	5%	mA/W 30 - 60 35 - 65
	10%	mA/W 60 - 110 70 - 120
Max. Responsivity Temperature Dependence (λ_c)	dB	0.3
Max. Responsivity Polarization Dependence	dB	0.1
Dark Current (@ 70 °C, -5 V bias)	0.5 G Bandwidth	nA 8
	2.0 G Bandwidth	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 5 s)	°C	≤ 260

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

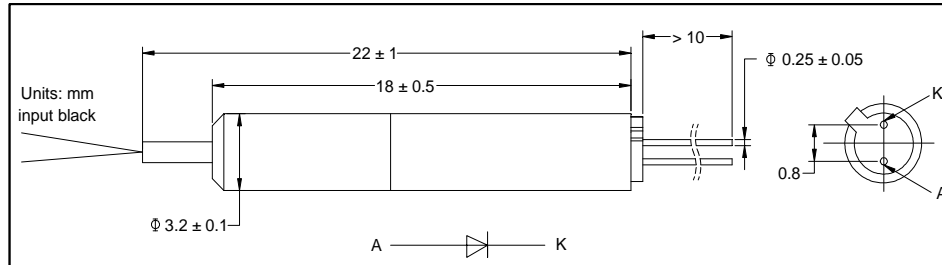
Package Dimensions

TO-46 package





Mini size package



Ordering Information

TAPD-①①-②②-③③-④④-⑤⑤-⑥⑥-⑦⑦

①①: Center Wavelength

55 - 1550 nm

31 - 1310 nm

②②: Tap Ratio

01 - 1%

02 - 2%

05 - 5%

10 - 10%

③③: Bandwidth

05 - 0.5 G

20 - 2.0 G

④④: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

⑤⑤: Fiber Jacket

B - 250 μm bare fiber

⑥⑥: Fiber Length

1 - 1.0 m

S - Specify

⑦⑦: Package Type

1 - TO-46 package

2 - Mini size package