



Polarization Insensitive Tap Isolator (TAPI Series)

Rev 11B

Description

The Polarization Insensitive Tap Isolator combines a tap coupler and polarization insensitive isolator into a single compact package. It has low polarization dependent loss and very low insertion loss variation. This optical isolator is ideally suited for fiber amplifiers and fiberoptic systems where signal monitoring is required.

Key Features

- Low Polarization Dependent Loss
- Low Insertion Loss

Applications

- Fiber Optic Instruments

Specifications

Parameters

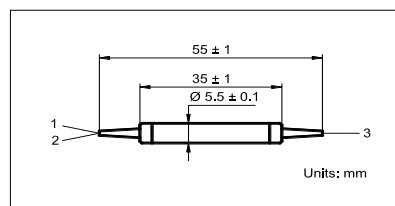
	Unit	Value	
Stage	-	Single Stage	Dual Stage
Center Wavelength	nm	1310 or 1550	
Typ. Peak Isolation	dB	40	55
Min. Isolation, $\lambda_c \pm 10$ nm, All Polarization States, 23 °C	dB	30	45
Typ. Insertion Loss ¹ , $\lambda_c \pm 20$ nm, All Polarization States, 23 °C	dB	0.45	0.6
Max. Insertion Loss ¹ , $\lambda_c \pm 20$ nm, - 5 to + 70 °C, All Polarization States	dB	0.6	0.8
Max. Polarization Dependent Loss (Port 1 to Port 3 and Port 1 to Port 2)	dB	0.1	0.15
Max. Polarization Mode Dispersion (Port 1 to Port 3)	ps	0.25 ²	0.05
Min. Directivity (Port 3 to Port 2)	dB	55	
Min. Return Loss (Input/Output)	dB	55/55	
Coupling Ratio & Tolerance ²	%	1.0 $\pm$ 0.5 or specify	
Max. Optical Power (Continuous Wave)	mW	300	
Max. Tensile Load	N	5	
Fiber Type	-	SMF-28 Fiber	
Operating Temperature	°C	- 5 to + 70	
Storage Temperature	°C	- 40 to + 85	

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

²Low PMD version is available. PMD < 0.05 ps.

³Specs are only for 1% tap ratio. Customized coupling ratio is available.

Package Dimensions



Ordering Information

TAPI-①-②②-③③-④-⑤-⑥-⑦

①: Stage	②②: Wavelength	③③: Coupling Ratio	④: PMD
1 - Single Stage	31 - 1310 nm 55 - 1550 nm	01 - 01/99	1 - 0.05 ps Max
2 - Dual Stage	48 - 1480 nm SS - Specify	SS - Specify	2 - Refer to Above Spec

⑤: Connector Type

1 - FC/UPC 4 - SC/APC
2 - FC/APC N - None
3 - SC/UPC S - Specify

⑥: Fiber Jacket

B - 250 µm Bare Fiber
L - 900 µm Loose Tube
S - Specify

⑦: Fiber Length

1 - 1.0 m
S - Specify