



Polarization Maintaining Tap Isolator (PMTI Series)

Rev 11

Description

The Polarization Maintaining Tap Isolator combines a tap coupler and polarization sensitive isolator into a single compact package. It has high ER and very low insertion loss. This optical isolator component is ideal for fiber amplifiers and fiber optic systems where signal monitoring is required.

Key Features

- High Extinction Ratio
- Low Insertion Loss

Applications

- EDFA
- Fiber Optic Instruments

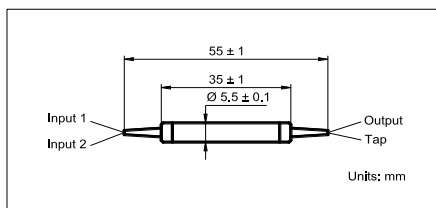
Specifications

Parameter	Unit	Value	
Stage	-	Single Stage	Dual Stage
Center Wavelength (λ_c)	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	$\lambda_c \pm 15$	
Configuration	-	2 × 2	
Max. Excess Loss	dB	0.9	1.0
Tap Ratio	%	1 ± 0.2, 2 ± 0.4, 4 ± 0.8, 5 ± 1.0, 10 ± 2.0	
Typ. Peak Isolation	dB	40	55
Min. Isolation, $\lambda_c \pm 10$ nm, All Polarization States, 23 °C	dB	30	45
Min. Extinction Ratio, 23 °C	dB	20	
Min. Return Loss	dB	50	
Min. Directivity	dB	50	
Max. Optical Power (Continuous Wave)	mW	300	
Max. Tensile Load	N	5	
Operating Temperature	°C	- 5 to + 70	
Storage Temperature	°C	- 40 to + 85	
Fiber Type	-	SMF-28 or PM Panda fiber for Tap Port	
	-	PM Panda fiber for Input 1, Input 2 and Output Port	

¹IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

²The optical path is aligned to slow axis and fast axis is blocked.

Package Dimensions



Output and Tap is for Input 1, it will be Exchanged from Input 2

Ordering Information

PMTI2-①-②②-③③-④-⑤-⑥-⑦-⑧

①: Stage

1 - Single Stage

2 - Dual Stage

②②: Wavelength

31 - 1310 nm

48 - 1480 nm

55 - 1550 nm

SS - Specify

③③: Coupling Ratio

01 - 1/99

02 - 2/98

04 - 4/96

05 - 5/95

10 - 10/90

SS - Specify

④: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

⑤: Fiber Jacket

B - 250 µm Bare Fiber

L - 900 µm Loose Tube

S - Specify

⑥: Fiber Type for Tap Port

M - SMF-28 Fiber

P - PM Panda fiber

S - Specify

⑦: Fiber Length

Q - 0.75 m

S - Specify

⑧: Working Axis

F - Fast Axis Blocked