



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 extinction ratio and very low insertion loss. This optical isolator is ideal for fiber amplifiers and fiber optic systems where signal monitoring is required.

Key Features

- High Extinction Ratio
- Low Insertion Loss

Applications

- Raman Amplifier
- Fiber Optic Instruments

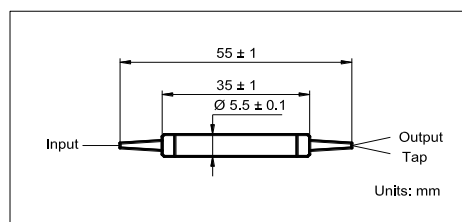
Specifications

Parameter	Unit	Value	
Stage	-	Single Stage	Dual Stage
Center Wavelength (λ_c)	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	$\lambda_c \pm 15$	
Max. Excess Loss	dB	0.8	0.9
Tap Ratio	%	$1 \pm 0.2, 2 \pm 0.4, 4 \pm 0.8, 5 \pm 1.0, 10 \pm 2.0$	
Typ. Peak Isolation	dB	40	55
Min. Isolation, $\lambda_c \pm 10$ nm, All Polarization States, 23 °C	dB	30	48
Min. Extinction Ratio	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 & Output Ports	

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



Ordering Information

PMTI-①-②②-③③-④-⑤-⑥-⑦-⑧

①: Stage	②②: Wavelength	③③: Coupling Ratio	④: Connector Type
1 - Single Stage	31 - 1310 nm	01 - 1/99 05 - 5/95	1 - FC/UPC 4 - SC/APC
2 - Dual Stage	48 - 1480 nm	02 - 2/98 10 - 10/90	2 - FC/APC N - None
	55 - 1550 nm	04 - 4/96 SS - Specify	3 - SC/UPC S - Specify
	SS - 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