



2 in 1 Polarization Insensitive Isolator

(TPI Series)

The Twin Isolator integrates two independent isolators into one standard isolator package and is excellently suited for EDFAs or instrumentation designs where two or more isolators are used. The Twin Isolator offers excellent temperature stability, low IL loss, high isolation, low temperature dependence and great space saving.

Specifications

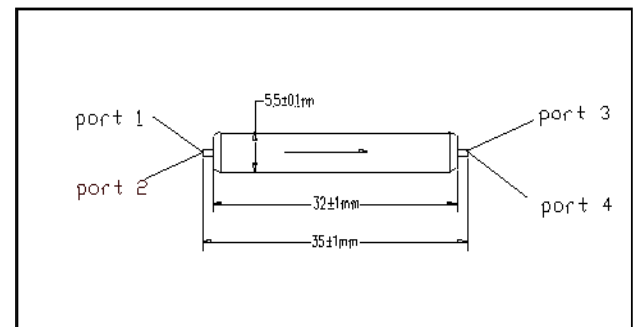
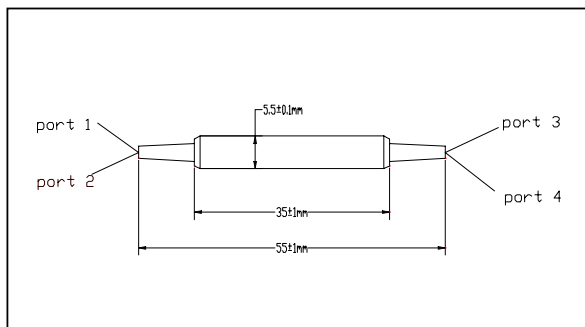
Parameters	Unit	Single Stage		Dual Stage	
		Grade P	Grade A	Grade P	Grade A
Center Wavelength (λ_c)	nm	1310, 1480 or 1550			
Typ. Peak Isolation(port 4 to port 1, port 3 to port 2)	dB	42	40	58	55
Min. Isolation (port 4 to port 1, port 3 to port 2) at 23°C; $\lambda_c \pm 15\text{nm}$, all polarization states	dB	32	30	46	45
Typ. Insertion Loss (port 1 to port 4, port 2 to port 3) at 23°C; $\lambda_c \pm 20\text{nm}$, all polarization states	dB	0.5	0.6	0.6	0.75
Max. Insertion Loss (port 1 to port 4, port 2 to port 3) at -5°C-70°C; $\lambda_c \pm 20\text{nm}$, all polarization states	dB	0.65	0.75	0.8	1
Min. Return Loss(input/output)	dB	55 / 55	55 / 55	55 / 55	55 / 55
Min. Directivity (port 1 to port 2, port 3 to port 4), at 23°C; λ_c	dB	55	55	55	55
Min. Crosstalk (port 1 to port 3, port 2 to port 4), at 23°C; $\lambda_c \pm 20\text{nm}$	dB	50	50	55	55
Max. PDL at 23°C	dB	0.1	0.15	0.1	0.2
Max. PMD ¹	ps	0.2 ¹	0.25 ¹	0.05	0.07
Max. Optical Power	mW	300			
Max. Tensile Load	N	5			
Operating Temperature	°C	-5 to +70			
Storage Temperature	°C	-40 to +85			

¹ Low PMD version is available. PMD < 0.05ps

*Above specifications are for device without connector.

*For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

Package Dimensions



Ordering Information

TPI-①-②②-③-④-⑤-⑥-⑦-⑧

①: Stage

1 - Single Stage

2 - Dual Stage

④: PMD

1 - 0.05ps max

2 - Refer to above spec.

②②: Wavelength

31 - 1310nm

48 - 1480nm

55 - 1550nm

SS - Specify

⑤: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

5 - LC/UPC

6 - ST/UPC

N - None

S - Specify

③: Grade

P - Premium grade

A - A grade

⑥: Fiber Type

B - 250um bare fiber

L - 900um loose tube

⑦: Fiber Length

1 - 1.0 m

S - Specify

⑧: Package Length

1 - 55mm

2 - 32mm