

PRODUCT INFORMATION SHEET

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.

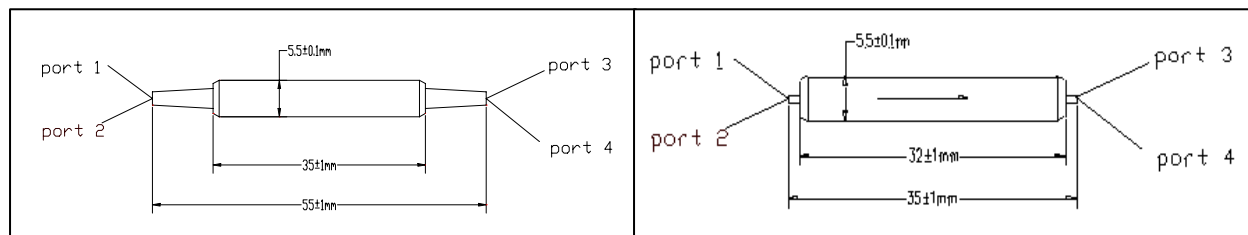
Specifications

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 3°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	0.4	0.5	0.5	0.7
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	0.6	0.7	0.7	0.9
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	0.05	0.1	0.05	0.15
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	$^\circ\text{C}$	-5 to +70			
Storage Temperature	$^\circ\text{C}$	-40 to +85			

¹ Low PMD version is available. PMD < 0.05ps

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

Package Dimensions



Ordering Information

TPI-①-②-③-④-⑤-⑥-⑦-⑧

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|---|---|---|--|---|
| ① Stage
1-Single Stage
2-Dual Stage | ② Wavelength
31 - 1310nm
48 - 1480nm
55 - 1550nm
SS - Specify | ③ Grade
P - Premium grade
A - A grade | ④ PMD
1 - 0.05ps max
2 - Refer to above spec | ⑤ Connector Type
1 - FC/UPC
2 - FC/APC
3 - SC/UPC
4 - SC/APC
5 - LC/UPC
N - None
S - Specify
6 - ST/UPC |
| ⑥ Fiber Typ
B - 250um bare fiber
L - 900um loose tube | ⑦ Fiber Length
1 - 1.0 m
S - Specify | ⑧ Package Length
1 - 55mm
2 - 32mm | | |