



Polarization Insensitive Isolator (PSSI & PDSI Series)

Rev 11

Description

The Polarization Insensitive Isolator is designed and manufactured according to Telcordia standard. The unique manufacturing process and optical path epoxy-free design enhance the device's high power handling capability. The optical isolator is characterized with high performance, high reliability and low cost. It has been widely used in EDFAs, Raman amplifiers, DWDM systems, fiber lasers, transmitters and other fiber optics communication equipment to suppress back reflection and back scattering.

Key Features

- Low Insertion Loss
- High Return Loss

Applications

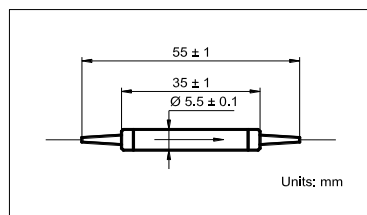
- EDFA
- Raman Amplifier

Specifications

Parameter	Unit	Value			
		Single Stage		Dual Stage	
Stage	-	Grade P	Grade A	Grade P	Grade A
Grade	-				
Center Wavelength (λ_c)	nm	1310, 1480 or 1550			
Typ. Peak Isolation	dB	42	40	58	55
Min. Isolation, $\lambda_c \pm 10$ nm, All Polarization States, 23 °C	dB	30	29	46	45
Typ. Insertion Loss, λ_c , All Polarization States, 23 °C	dB	0.35	0.5	0.4	0.6
Max. Insertion Loss, $\lambda_c \pm 20$ nm, Operating Temperature All Polarization States	dB	0.5	0.7	0.6	0.9
Min. Return Loss (Input/Output)	dB	60/55	60/55	60/55	60/55
Max. Polarization Dependent Loss, 23 °C	dB	0.05	0.10	0.05	0.15
Max. Polarization Mode Dispersion	ps	0.20	0.25	0.05	0.07
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, RL is 5 dB lower for each connector added.

Package Dimensions



Ordering Information

Single Stage: PSSI-①①-②-③-④-⑤-⑥

①①: Wavelength

31 - 1310 nm 55 - 1550 nm

48 - 1480 nm SS - Specify

Dual Stage: PDSI-①①-②-③-④-⑤-⑥

②: Grade

P - Premium

A - A Grade

③: PMD

1 - 0.05 ps Max.

2 - Refer to Above Spec.

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

T - 900 μm Tight Buffer

S - Specify

⑥: Fiber Length

1 - 1.0 m

S - Specify