

## High Power Polarization Insensitive Isolator (PSSI & PDSI Series)

Rev 11

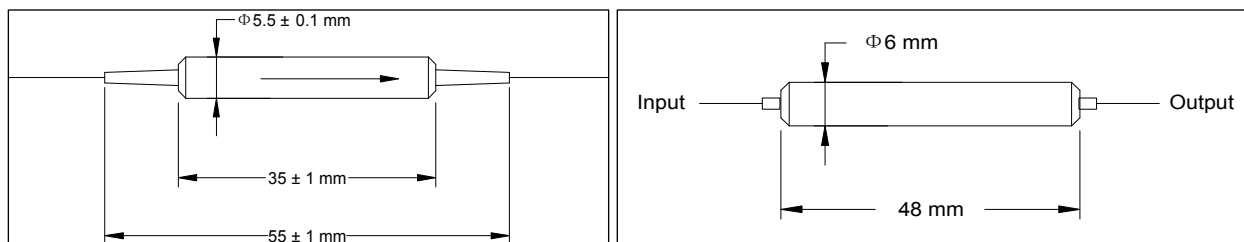
The Polarization Insensitive Isolator is designed and manufactured according to Telcordia standard. The unique manufacturing process and optical path epoxy-free design enhance the device high power handling capability. The device is characterized with high performance, high reliability and low cost.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

### Specifications

Parameter	Unit	Single Stage		Dual Stage	
		Grade P	Grade A	Grade P	Grade A
Center Wavelength ( $\lambda_c$ )	nm	1310, 1480 or 1550			
Typ. Peak Isolation	dB	42	40	58	55
Min. Isolation, $\lambda_c \pm 10$ nm, 23 °C, all polarization states	dB	30	29	46	45
Typ. Insertion Loss, $\lambda_c$ , 23 °C; all polarization states	dB	0.35	0.5	0.4	0.6
Max. Insertion Loss, $\lambda_c \pm 20$ nm, all 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	0.10	0.15	0.10	0.15
Max. Polarization Mode Dispersion	ps	0.20	0.25	0.05	0.07
Max. Optical Power (Continuous Wave)	W	10			
Max. Peak Power for ns Pulse	kW	10			
Max. Tensile Load	N	5			
Fiber Type		SMF-28 fiber			
Operating Temperature	°C	-5 to +70			
Storage Temperature	°C	-40 to +85			

\*IL is 0.3 dB higher, RL is 5 dB lower for each connector added. Optical Power will be 1W only with connector added.

### Package Dimensions



Type A ( $\leq 5$ W)

Type B (6 W - 10 W)

### Ordering Information

**Single Stage: PSSI-①①-②②-③-④-⑤-⑥-⑦**

①①: Wavelength

31 - 1310 nm

48 - 1480 nm

55 - 1550 nm

SS - Specify

②②: Handling Power

05 - 5 W

10 - 10 W

SS - Specify

**Dual Stage: PDSI-①①-②②-③-④-⑤-⑥-⑦**

③: Grade

P - Premium

A - A grade

⑥: Fiber Length

1 - 1.0 m

S - Specify

④: PMD

1 - 0.05 ps max

2 - Refer to above spec

⑦: Power Type

P - Pulse Application

C - Continuous Wave

⑤: Fiber Jacket

B - 250  $\mu$ m bare fiber

L - 900  $\mu$ m loose tube

S - Specify