

High Power Polarization Insensitive Isolator (PSSI & PDSI Series)

Rev 11

Description

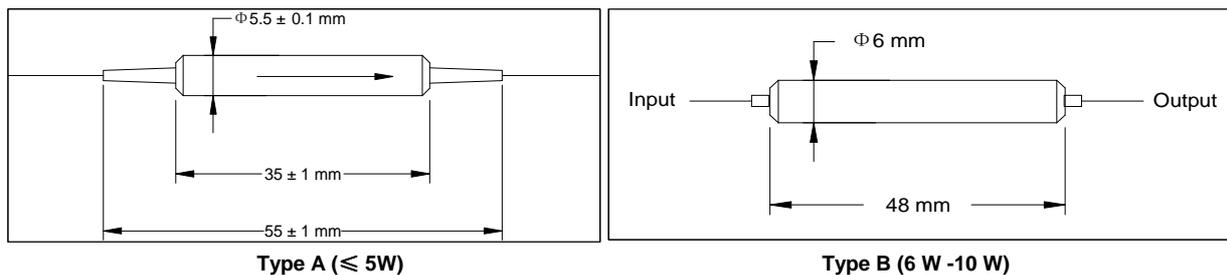
The Polarization Insensitive Isolator is designed and manufactured according to Telcordia standard. The unique manufacturing process and optical path epoxy-free design enhance the device high power handling capability. The device is characterized with high performance, high reliability and low cost. 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 (λ_c)	nm	1310, 1480, 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, λ_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			

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

Package Dimensions



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

④: PMD
1 - 0.05 ps Max
2 - Refer to above spec

⑤: Fiber Jacket
B - 250 μ m Bare Fiber
L - 900 μ m Loose Tube
S - Specify

⑥: Fiber Length
1 - 1.0 m
S - Specify

⑦: Power Type
P - Pulse Application
C - Continuous Wave