



Polarization Insensitive Isolator for Hi-Rel (PDSI Series)

Spec. Review No.: SR23959

Description

The Polarization Insensitive Isolator is designed and manufactured for autonomous vehicles. 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. It has been widely used in submarine repeaters, Raman amplifiers, DWDM systems and other optics communication systems suppress back reflection and back scattering.

Key Features

- Low Insertion Loss
- High Operating Power
- High Reliability

Applications

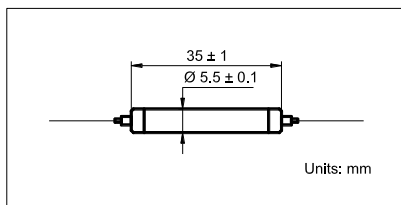
- Repeaters
- Raman Amplifiers

Specifications

Parameter	Unit	Dual Stage
Center Wavelength (λ_c)	nm	1550
Min. Isolation, $\lambda_c \pm 20$ nm, 23 °C, all polarization states	dB	50
Max. Insertion Loss, $\lambda_c \pm 20$ nm, all polarization states	dB	0.4
Min. Return Loss, 23 °C	dB	55
Max. Polarization Dependent Loss, $\lambda_c \pm 20$ nm	dB	0.1
Max. Temperature Dependent Loss, $\lambda_c \pm 20$ nm	dB	0.12
Max. Polarization Mode Dispersion	ps	0.05
Max. Average Optical Power	mW	500
Max. Tensile Load	N	5
Fiber Type	-	SMF-28/200kpsi
Failures In Time (FIT)		< 0.1
Operating Temperature	°C	- 40 to +105
Storage Temperature	°C	- 40 to +85

¹IL is 0.3 dB higher, RL is 3 dB lower for each connector added.

Package Dimensions



Ordering Information

PDSI-①①-②-③-④-⑤-⑥-SUB

①①: Wavelength

55 - 1550 nm

SS - Specify

②: Grade

P - Premium

③: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

④: Fiber Type

B - 250 μ m bare fiber

L - 900 μ m loose tube

S - Specify

⑤: Fiber Length

1 - 1.0 m

S - Specify

⑥: Operating Power

0.5 - 500 mW

01 - 1000 mW

S - Specify