

1064 nm Polarization Sensitive Isolator (PSI & PDI Series)

Rev 11C

Description

The Polarization Sensitive 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 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 equipments to suppress back reflection and back scattering.

Key Features

- High Isolation
- High Return Loss
- Low Insertion Loss

Applications

- EDFAs
- Raman Amplifiers
- DWDM Systems

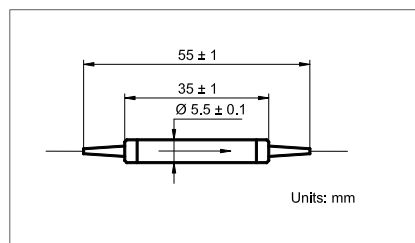
Specifications

| Parameter | Unit | Value | | | |
|-----------------------------------------------------------------------------------------|------|---------------|---------|------------|---------|
| | | Single Stage | | Dual Stage | |
| Stage | - | Grade P | Grade A | Grade P | Grade A |
| Grade | - | | | | |
| Center Wavelength (λ_c) | nm | 1064 | | | |
| Typ. Peak Isolation | dB | 40 | 38 | 55 | 52 |
| ² Min. Isolation, λ_c , 23 °C, all polarization states, ≤ 30 mW | dB | 32 | 30 | 45 | 42 |
| Typ. Insertion Loss, λ_c , 23 °C, all polarization states | dB | 1.5 | 1.6 | 2.4 | 2.6 |
| Max. Insertion Loss, λ_c , - 5 °C to 50 °C, all polarization state | dB | 2.0 | 2.2 | 3.4 | 3.6 |
| Min. Return Loss (Input/Output) | dB | 55/50 | 55/50 | 55/50 | 55/50 |
| Min. Polarization Dependent Loss, 23 °C | dB | 20 | 20 | 20 | 20 |
| Max. Optical Power (Continuous Wave) | mW | 300 | | | |
| Max. Tensile Load | N | 5 | | | |
| Fiber Type | - | HI 1060 Fiber | | | |
| Operating Temperature | °C | - 5 to + 50 | | | |
| Storage Temperature | °C | - 40 to + 85 | | | |

¹IL is 0.5 dB higher, RL is 5 dB lower for each connector added.

²The isolation is related to the input power. Please inform us when you need high isolation and operate above 30 mW.

Package Dimensions



Ordering Information

PSI-06-①-②-③-④
PDI-06-①-②-③-④

| | | | |
|-------------|---------------------------|----------------------------|-----------------|
| ①: Grade | ②: Connector Type | ③: Fiber Type | ④: Fiber Length |
| P - Premium | 1 - FC/UPC 4 - SC/APC | B - 250 μ m Bare Fiber | 1 - 1.0 m |
| A - A Grade | 2 - FC/APC N - None | L - 900 μ m Loose Tube | S - Specify |
| | 3 - SC/UPC S - Specify | S - Specify | |