



Polarization Independent Isolator Core (IC Series)

Rev 11B

Description

The Polarization Insensitive Isolator Core is a Faraday Rotator based component for in-line fiber optic isolator. It can also integrate with other components to block back reflection or to enhance component isolation. It is insensitive to the input beams polarization state and has high isolation, low insertion loss, low PDL and low PMD.

Key Features

- High Isolation
- Low Insertion Loss

Applications

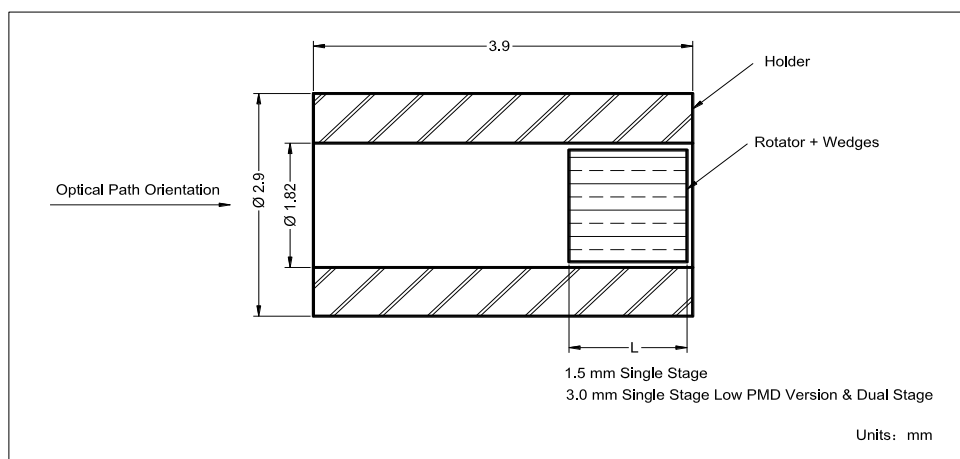
- Protect Laser Chip

Specifications

| Parameter | Unit | Value | | | |
|--|------|------------------------|------------|--------------|------------|
| Stage | - | Single Stage | Dual Stage | Single Stage | Dual Stage |
| Center Wavelength (λ_c) | nm | 1310 or 1550 | | 1064 | |
| Typ. Peak Isolation | dB | 42 | 52 | 38 | 52 |
| Min. Isolation, $\lambda_c \pm 10$ nm, 23 °C | dB | 30 | 40 | 25 | 40 |
| Max. Insertion Loss, 23 °C | dB | 0.12/0.15 ¹ | | 1.0 | 2.0 |
| Max. Polarization Dependent Loss, 23 °C | dB | 0.05 | 0.05 | 0.05 | 0.05 |
| Max. Polarization Mode Dispersion | ps | 0.2/0.05 ¹ | | - | - |
| Clear Aperture | mm | 0.9 | | | |
| Max. Optical Power (Continuous Wave) | mW | 300 | | | |
| Operating Temperature | °C | - 5 to + 70 | | | |
| Storage Temperature | °C | - 40 to + 85 | | | |

¹For PMD Compensated Version.

Package Dimensions



Ordering Information

IC-①-②②-③-④

| ①: Stage | ②②: Wavelength | ③: PMD Requirement | ④: Optical Path Orientation |
|------------------|------------------------------|-------------------------|----------------------------------|
| 1 - Single Stage | 31 - 1310 nm 06 - 1060 nm | 1 - 0.05 ps Max. | F - Forward (As Indicated Above) |
| 2 - Dual Stage | 55 - 1550 nm SS - Specify | 2 - Refer to Above Spec | B - Backward |