

2050nm Polarization Insensitive Isolator

Key Features

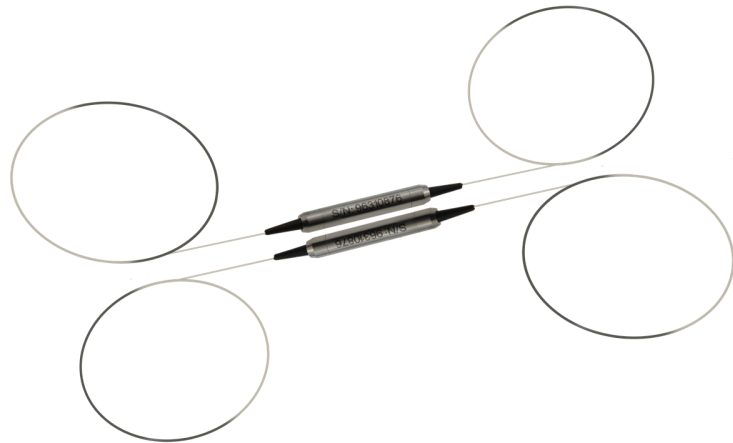
- Low insertion loss
- High isolation
- Optical path epoxy free
- Low PDL
- High Reliability
- Excellent Temperature Stability

Polarization Insensitive Isolator utilizes Faraday Effect of Magneto optical crystal. It guides optical light in one direction and eliminates back reflection and back scattering in the reverse direction at any polarization state. The unique manufacturing process and optical path epoxy-free design enhance the device's high-power handling capability. The devices are characterized with low insertion loss, high isolation, high return loss, excellent environmental stability and reliability and low cost. It has been widely used in amplifiers, DWDM systems, Fiber lasers, transmitters and other fiber optic communication equipments to suppress back reflection and back scattering.

If you do not see a standard isolator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom isolator. Requests for custom fiber pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed.

Applications

- WDM System
- Fiber Amplifiers
- Fiber Lasers
- Transmitters



For more Info

Please contact us at:

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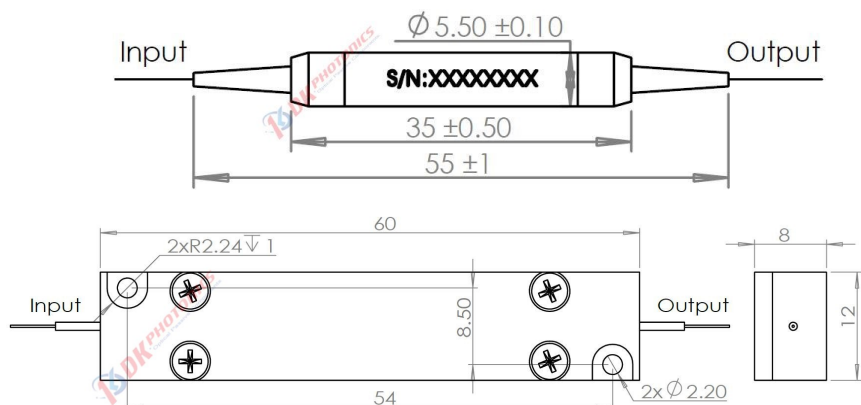
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

Dahe Road, Longhua Dis.,

Shenzhen, China 518109

Package Dimension:



*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

2050nm Polarization Insensitive Isolator

Performance Specifications

| Parameter | Unit | Values | |
|--|------|---|------|
| Stage | - | Single | Dual |
| Grade | - | P | |
| Operating Wavelength(λ_c) | nm | 2050 | |
| Min. Isolation at 23°C ($\lambda_c \pm 50$ nm) | dB | 16 | 35 |
| Max. Insertion loss at 23°C ($\lambda_c \pm 20$ nm) | dB | 1.2 | 1.5 |
| Return Loss (In/Out) | dB | > 50/50 | |
| PDL | dB | < 0.15 | |
| Maximum Power Handling (CW) | W | 0.3, 1, 2, 5, 10 | |
| Max. Tensile Load | N | 5 | |
| Fiber Type | - | SMF-28e(default) or SM1950 fiber | |
| Operating Temperature | °C | -5~+70 | |
| Storage Temperature | °C | -40 ~+85 | |
| Dimensions | mm | $\Phi 5.5 \times L35(<5W)$, $60 \times 12 \times 8(>5W)$ | |

- Above specifications are for device without connector.
- For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Power transmits through the connector less than 2W.

Order information P/N: ISO -①-②-③-④-⑤-⑥-⑦-⑧

When you inquire, please provide the correct P/N number according to our ordering information and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250 μ m bare fiber pigtail.

| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ |
|------------------|----------------------------|-----------|-----------------|-----------------------------|--|-----------------------|--|
| Type | Wavelength | Grade | Power Handling | Fiber Type | Pigtails Diameter | Fiber Length | Connector |
| IS: Single stage | 1940:1940nm 2000:2000nm | P:P Grade | L:<0.3W 1:1W | S28: SMF-28e S19: SM1950 | 25:250 μ m bare fiber | 05:0.5m 10:1.0m | 00: None FP: FC/PC |
| IU: Dual stage | 2050:2050nm XX: Others | | 3:3W 5:5W | | 90:900 μ m Loose Fiber XX: Others | 15:1.5m XX: Others | FA: FC/APC LA: LC/APC XX: Others |

Part Number Example: ISO-IS-2050-P-L-S19-90-10-FA

Description: 2050nm single stage fiber optic isolator, P grade, 0.3W power handling, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors at all ports.

Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.