



## 1550nm Polarization Insensitive Isolator

### Key Features

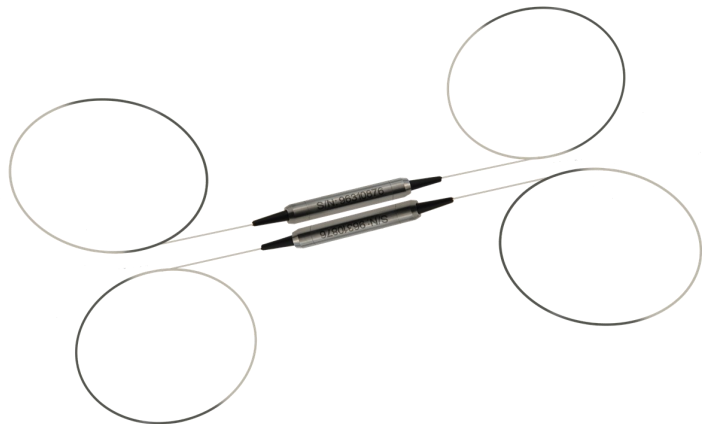
- Low insertion loss
- High isolation
- Optical path epoxy free
- Low PDL & PMD
- High Reliability
- Excellent Temperature Stability

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 EDFAs, Raman 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
- EDFA
- Fiber Amplifiers
- Fiber Lasers
- Transmitters



## For more Info

### Please contact us at:

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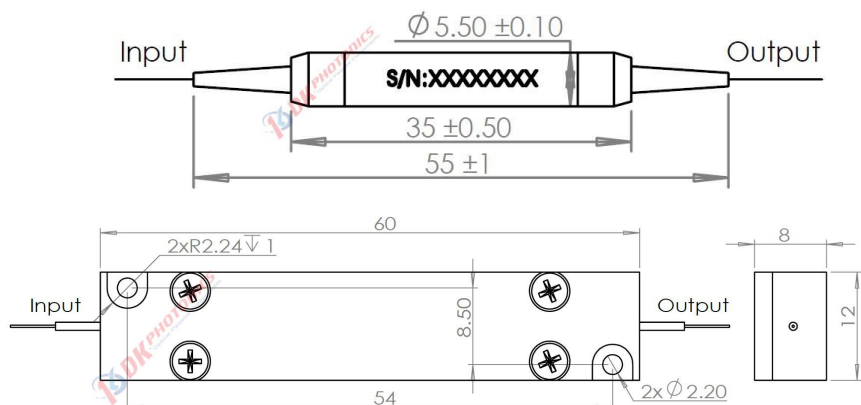
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

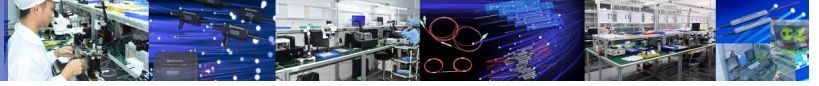
Dahe Road, Longhua Dis.,

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.



## 1550nm Polarization Insensitive Isolator

### Performance Specifications

Parameter	Unit	Values			
		Single		Dual	
Stage	-	Single		Dual	
Grade	-	P	A	P	A
Operating Wavelength	nm	1550			
Band Width	nm	±20			
Typ. Peak Isolation at 23°C	dB	42	40	52	50
Min. Isolation at 23°C	dB	32	30	46	45
Typ. Insertion Loss at 23°C	dB	0.3	0.4	0.4	0.5
Max. Insertion loss at 23°C	dB	0.5	0.7	0.6	0.8
Return Loss (In/Out)	dB	>60/55	>55/50	>60/55	>55/50
PDL	dB	< 0.05	< 0.1	< 0.05	< 0.1
PMD	ps	0.2(0.05 available upon request)			
Maximum Power Handling(CW)	W	0.3, 1, 3, 5, 10			
Max. Tensile Load	N	5			
Fiber Type	-	SMF-28e fiber, or other			
Operating Temperature	°C	-20~+70			
Storage Temperature	°C	-40 ~+85			
Dimensions	mm	Φ5.5× L35(<10W), 60x12x8(>10W)			

1. Above specifications are for device without connector.

2. 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 250μm 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 IU: Dual stage	15:1550nm XX: Others	P:P Grade A: A Grade	L:<0.3W 1:1W 3:3W 5:5W	S28: SMF-28e	25:250μm bare fiber 90:900μm Loose Fiber XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC LA: LC/APC XX: Others

**Part Number Example:** ISO-IS-15-P-L-S28-90-10-FA

**Description:** 1550nm 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.