1064nm Polarization Maintaining Isolator

Key Features

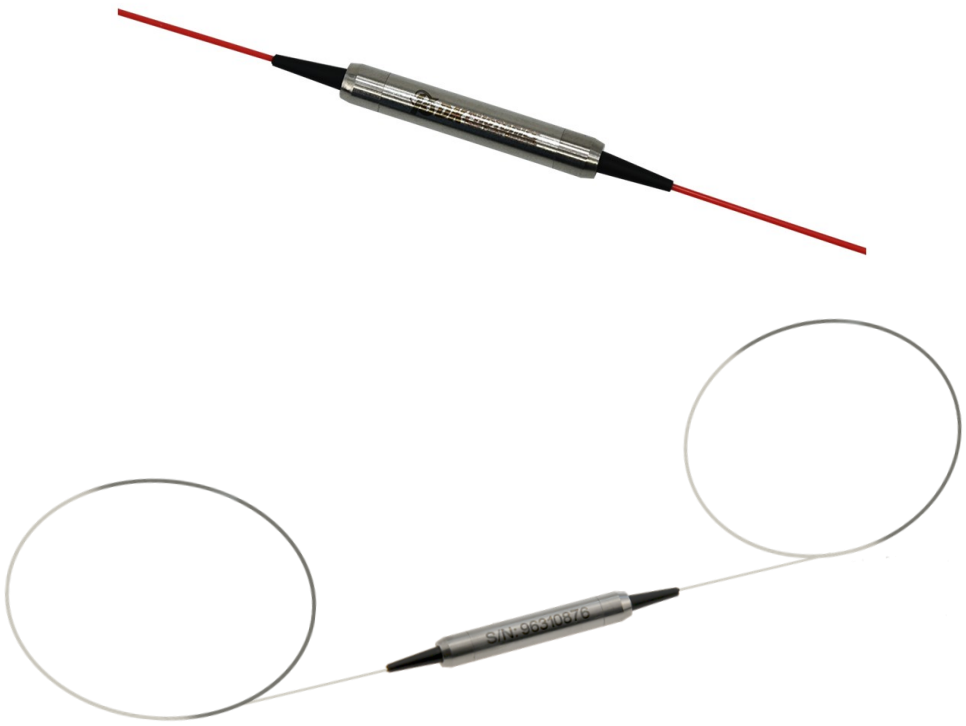
- Low Insertion Loss
- High Extinction Ratio
- High isolation
- Excellent stability and reliability

The Polarization Maintaining Isolator is a two port micro-optic device built with PM panda fiber. The PM isolator features low insertion loss, high isolation, high extinction ratio and high reliability and stability. The device guides optical light in one direction and eliminates back reflection and back scattering in the reverse direction. The device can be built with bare fiber, or 900um jacket cable. The PM Panda Fiber Isolator is widely used in amplifier systems, fiber optic systems and fiber lasers.

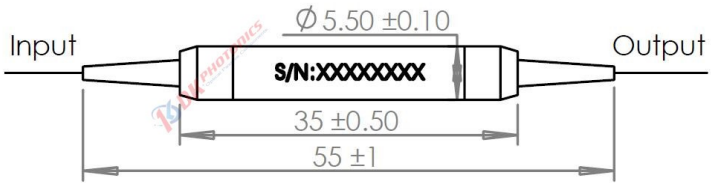
If you do not see a standard isolator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom isolator. Requests for custom fiber pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed. DK Photonics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

Applications

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Communications



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.

For more Info

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1064nm Polarization Maintaining Isolator

Performance Specifications

Parameter	Unit	Values			
Operating wavelength	nm	1064			
Grade	-	P	A	P	A
Type	-	Single Stage		Dual Stage	
Operating Wavelength Range	nm	±5			
Typ. Insertion Loss at 23℃	dB	1.5	1.6	2.3	2.6
Max. Insertion loss at 23℃	dB	1.8	2.2	3.2	3.4
Typ. Peak Isolation at 23℃	dB	35	32	55	52
Min. Isolation at 23℃	dB	30	28	45	42
Extinction ratio (Type B)	dB	≥20	≥18	≥20	≥18
Extinction ratio (Type F)	dB	≥22	≥20	≥22	≥20
Return loss (input/output)	dB	≥50/50			
Fiber Type	-	PM980-XP / PM1060L Fiber or other			
Max. Power Handling (CW)	mW	200		100	
Max. Peak Power for Pulse	kW	1,5,10			
Max. Tensile Load	N	5			
Operating temperature	℃	-5℃ ~ + 70℃			
Storage temperature	℃	-40℃ ~ + 85 ℃			
Dimensions	mm	Φ5.5× L35			
“B” for Both axis working, “F” for Fast axis blocking					

1. Above specifications are for device without connector.
2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. The default connector key is aligned to slow axis.
3. For this 1064nm Isolator, Due to high IL, it is recommended to use average power of <200mW for single stage and <100mW for dual stage. If you need higher handle power, please look for our 1064nm High power isolator.
4. If there is pulse application, please be sure to inform us of pulse energy and peak power.

Order information

P/N: PMISO-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	Axis Alignment	Pigtails Diameter	Fiber Length	Connector Type
S: Single stage D: Dual stage	64:1064nm XX: Others	P:P Grade A: A Grade	L: Refer to the above table	B: Both axis working F: Fast axis blocking	25:250μm bare fiber 90:900μm Loose Fiber XX: Others	08:0.8m 10:1.0m XX: Others	00: None FP: FC/PC FA: FC/APC XX: Others

Part Number Example: PMISO-S-64-P-L-F-25-10-00

Description: 1064nm Polarization Maintaining single stage Isolator - 300mW, <1kW peak power, P grade, Fast axis working, and 1.0m PM980-XP fiber length with bare fiber and no connectors at all ports.

Ordering Information for Custom Parts

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