



## 1064nm Polarization Maintaining Isolator & Band Pass Filter Hybrid Combination

### Key Features

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

### Applications

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Communications

The Polarization Maintaining Isolator & BPF, a two port micro-optic device built with PM panda fiber is a combination of a BPF and an isolator in a compact package. The PM BPF & I solator features low insertion loss, high isolation, high extinction ratio and high reliability and stability. The device guides optical light in one direction and block out unwanted noise signals, 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 BPF Isolator is widely used in amplifier systems, fiber optic systems and fiber lasers.

If you do not see a standard BPF & isolator that meet your needs, we welcome the opportunity to review your desired specification and quote a custom isolator. Requests for custom fiber pigtailed, 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.



## For more Info

### Please contact us at:

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Fax: +86-755-26746512

E-mail: [sales@dkphotonics.com](mailto:sales@dkphotonics.com)

<https://www.dkphotonics.com>

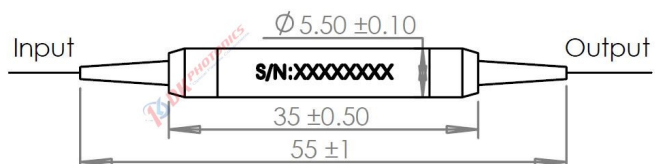
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

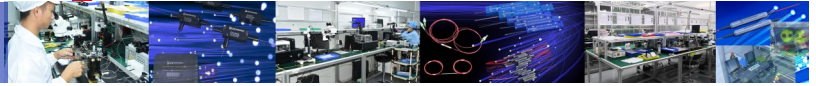
Dahe Road, Longhua Dis.,

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.



## 1064nm Polarization Maintaining Isolator & Band Pass Filter Hybrid Combination

### Performance Specifications

Parameter	Unit	Specification					
		Single Stage			Dual Stage		
Stage		Single Stage			Dual Stage		
Operating wavelength	nm	1064					
Min. Pass bandwidth@0.5dB	nm	2	5	8	2	5	8
Min. Stop bandwidth@25dB down	nm	6	12	20	6	12	20
Typ. Insertion Loss at 23°C	dB	1.8			2.8		
Max. Insertion loss at 23°C	dB	2.3			3.5		
Typ. Peak Isolation at 23°C	dB	42			55		
Min. Isolation at 23°C	dB	35			45		
Extinction ratio (Type B)	dB	≥20					
Extinction ratio (Type F)	dB	≥22					
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	°C	-5°C ~ + 70°C					
Storage temperature	°C	-40°C ~ + 85 °C					
Dimensions	mm	Φ5.5× L35					

“B” for Both axis working, “F” for Fast axis blocking

- Above specifications are for device without connector.
- 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. Power transmits through the connector less than 2W.
- 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.
- If there is pulse application, please be sure to inform us of pulse energy and peak power.

### Order information P/N: PMISO&BPF-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	Pass bandwidth	Power Handling	Axis Alignment	Pigtail Diameter	Fiber Length	Connector
S:Single stage	64:1064nm	2:2nm 5:5nm	L: Refer to the above table	B:Both axis working	25:250µm bare fiber 90:900µm Loose Fiber	08:0.8m 10:1.0m	00: None FP: FC/PC FA: FC/APC XX: Others
D: Dual Stage		8:8nm		F: Fast axis blocking	XX: Others	XX: Others	

**Part Number Example:** PMISO&BPF-S-64-2-L-F-25-10-00

**Description:** 1064nm Polarization Maintaining single stage Isolator & BPF Hybrid Combination- 300mW, <1kW peak power, 2nm pass bandwidth, fast axis blocking, and 1.0m PM980-XP fiber length with bare fiber and no connector at all ports.

### Ordering Information for Custom Parts

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