

# 1550nm SM Isolator & Band Pass Filter Hybrid Combination

#### **Key Features**

- Low Insertion Loss
- Low PDL
- High isolation
- Excellent stability and reliability

## **Applications**

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Communications

The SM 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 BPF & isolator 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 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.



# For more Info

#### Please contact us at:

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E-mail: sales@dkphotonics.com

https://www.dkphotonics.com

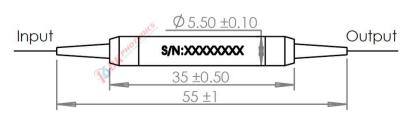
Add.:

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.





#### 1550nm SM Isolator & Band Pass Filter Hybrid Combination

#### **Performance Specifications**

Parameter	Unit	Specification						
Stage		Single Stage Dual Stage						
Operating wavelength	nm			15	50			
Min. Pass bandwidth@0.5dB	nm	2	5	10	2	5	10	
Min. Stop bandwidth@25dB down	nm	6	12	20	6	12	20	
Typ. Insertion Loss at 23°C	dB		0.6			0.7		
Max. Insertion loss at 23°C	dB		0.8			0.9		
Typ. Peak Isolation at 23°C	dB		42			52		
Min. Isolation at 23°C	dB		32			46		
Max. PDL	dB			0	.1			
Return loss (input/output)	dB	dB ≥60/55						
Fiber Type	- SMF-28e or other							
Max. Power Handling (CW)	W	V 0.3, 1, 3, 5, 10						
Max. Peak Power for Pulse	kW	1, 5,10						
Max. Tensile Load	N			į	5			
Operating temperature	°C	-5°C ~ + 70°C						
Storage temperature	$^{\circ}\mathrm{C}$	-40°C ~ + 85°C						
Dimensions	mm	Ф5.5× L35						

- 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.
- 3. If there is pulse application, please be sure to inform us of pulse energy and peak power.

#### Order information P/N: ISO&BPF -①-②-③-④-⑤-⑥-⑦

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
Туре	Wavelength	Pass bandwidth	Power Handling	Pigtail Diameter	Fiber Length	Connector
S: Single stage D: Dual stage	15:1550nm XX: Others	2:2nm 5:5nm 10:10nm	L: Refer to the above table	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 SP: SC/PC SA: SC/APC XX: Others

Part Number Example: ISO&BPF-S-15-2-L-25-10-00

**Description:** 1550nm SM single stage Isolator & BPF Hybrid Combination- 300mW, 2nm pass bandwidth, 1.0m 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.