



# **Key Features**

- Low Insertion Loss
- High isolation
- High power handling

# **Applications**

- Fiber laser
- Fiber amplifier

## 1040nm PM Band Pass Filter

The 1040nm PM Band-pass Filter is a micro optics device based on environmentally stable thin-film filter technology. It is used to block out unwanted noise signals in fiber amplifier or fiber laser systems. The components are characterized with high isolation, low insertion loss, high return loss, excellent environmental stability and high power handling capability. They are ideal for fiber amplifiers, fiber lasers, and high speed communication system and instrumentation applications.



# Part of the reference spectrum

Center Wave- length	Pass Band	Pass band @0.5dB
1040nm	2.2nm	
104011111	2.21111	

# For more Info

#### Please contact us at:

Tel: +86-755-23736280

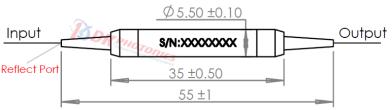
Fax: +86-755-26746512

E-mail: sales@dkphotonics.com https://www.dkphotonics.com

Add.:

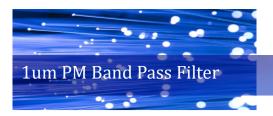
4F, Bldg. 18, Qinghu Industrial Park, Dahe Road, Longhua Dis., Shenzhen, China 518109

# **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.

Email: sales@dkphotonics.com







### 1040nm PM Band Pass Filter

### **Performance Specifications**

Parameter	Unit	Specification		
Center Wavelength	nm	1040		
Max. Pass bandwidth@0.5dB	nm	2.2		
Max. Stop bandwidth@25dB down	nm	6		
Max. Insertion Loss of Pass Band	dB	0.8		
Min. Extinction Ratio Type B	dB	20		
Type F	dB	22		
Min. Return Loss	dB	50		
Fiber Type	-	PM980-XP fiber, or other		
Max. Power Handling	W	0.3, 1, 2, 3, 5, 10		
Max. Tensile Load	N	5		
Operating Temperature	${}^{\circ}\!$	-5 - 75		
Storage Temperature	$^{\circ}\! C$	-40 - 85		
Dimensions	mm	Ф5.5×L35		

<sup>\*</sup>Above specifications are for device without connector.

# Order information P/N: PMBPF-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	8
Port	Wavelength	Pass band- width	Axis Align- ment	Power Han- dling	Pigtails Diame- ter	Fiber Length	Connector
101:1x1(default)	40:1040nm	2.2:2.2nm	B: Both axis	L:<0.3W	25:250μm bare fiber 90:900μm Loose Fiber	05:0.5m	00: None
102: 1x2(With reflect unwanted signals port)			working F: Fast axis blocking	1:1W 2:2W		08:0.8m	FP: FC/PC
						10:1.0m	FA: FC/APC
,					XX: Others	XX: Others	LA: LC/APC
							XX: Others

Part Number Example: PMBPF-101-40-2.2-B-L-25-10-00

**Description:** 1040nm PM Band Pass Filter, 1x1, 2.2nm pass bandwidth, 300mW power, both axis working ,1.0m PM980 fiber, with bare fiber, no connectors at all ports.

# **Ordering Information for Custom Parts**

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

<sup>\* &</sup>quot;B" for Both axis working, "F" for Fast axis blocking, Integrated polarizer.

<sup>\*</sup>For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower, ER (PM fiber) will be 2dB lower. Power transmits through the connector less than 2W, connector key is default aligned to the slow axis.

<sup>\*</sup>For >10W high power applications, we will use heat sink package, contact DK Photonics for details.

<sup>\*</sup>Since the function of the BPF is to be blocked unwanted noise signals, the blocked light remains in the interior of the housing, so we do not recommend applying it to too high power, or adding reflection port to reflect the blocked light.

<sup>\*</sup>Other center wavelengths and bandwidths can also be customized, but MOQ is required, please contact us.