

## **Key Features**

- Low Insertion Loss
- High Isolation
- High Extinction Ratio
- High power handling
- High Stability and Reliability

## **Applications**

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Monitoring in Coherent Systems
- Communications

## 980/1064nm 1X2 Polarization Maintaining Filter WDM

The Polarization Maintaining Filter WDM multiplexes PM signals and maintains the output polarization with high extinction ratio using advanced microoptic filter technology. All input and output fibers are polarization maintaining. It utilizes advanced filter technology to yield wide-band, low insertion loss, high polarization extinction, high return loss in a compact package. This product can also be used to multiplex other wavelengths. including 980/1064 nm (pulsed laser applications) and 1064/1550 nm (Erbium-Ytterbium pumping). Low power (300 mW, 500 mW) and high power (5W) handling are available. It can also be provided with a PM isolator integrated in the same package. They are ideal for polarization maintaining fiber amplifiers, fiber lasers, and high speed communication system and instrumentation applications.

If you do not see a standard Polarization Maintaining Filter WDM that meets your needs, we welcome the opportunity to review your desired specification and quote a custom Polarization Maintaining Filter WDM. Custom pigtail fibers can be accommodated, as well as custom operational Pump & Signal wavelengths, and power handling requirements. DK Photonics can respond to custom requirements with short lead times.



# For more Info

#### Please contact us at:

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Add.:

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#### **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.



## 980/1064nm 1X2 Polarization Maintaining Filter WDM

### **Performance Specifications**

Parameter		Unit	T980/R1064	T1064/R980
Transmission Wavelength Range		nm	960~990	1020~1080
Reflect Wavelength Range		nm	1020~1080	960~990
Max. Insertion Loss@23℃	Transmission	dB	0.8	
	Reflect	dB	0.5	
Min. Isolation@23℃	Transmission	dB	25	
	Reflect	dB	12	
Min. Extinction Ratio@23℃		dB	20	
Min. Channel Flatness		dB	0.3	
Min. Return Loss		dB	50	
Max. Power Handling(CW)		W	0.3, 0.7, 1, 2, 3, 5,10	
Max. Tensile Load		N	5	
Fiber Type		-	PM980-XP panda fiber	
Operating Temperature		${\mathbb C}$	-5 to +70	
Storage Temperature		${\mathbb C}$	-40 to +85	
Package Dimensions		mm	Ø5.5 x L35	

- 1. Above specifications are for device without connector, and the PM WDM device is both axis working. All parameters are tested at room temperature.
- 2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. Power transmits through the connector less than 2W. The default connector key is aligned to slow axis.
- 3. For >10W high power applications, we will use heat sink package, contact DK Photonics for details.
- 4. If there is pulse application, please be sure to inform us of pulse energy and peak power.

#### Order information P/N: PMFWDM-①-②-③-④-⑤

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	<b>⑤</b>
Wavelength	Power Handling	Pigtails Diameter	Fiber Length	Connector
96:980nm pass/1064nm reflect	S:<0.3W	25:250μm bare fiber	05:0.5m	00: None
69:1064nm pass/980nm reflect	L:<0.7W	90:900µm Loose Tube	08:0.8m	FP: FC/PC
	1:1W	XX: Others	10:1.0m	FA: FC/APC
	2:2W		XX: Others	LA: LC/APC
				XX: Others

Part Number Example: PMFWDM-69-1-90-10-FA

**Description:** 980/1064nm Polarization Maintaining Filter WDM - 1W, 1064 pass/980nm reflect, with 0.9mm OD loose tube, 1.0m fiber length, and 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.