



## **Key Features**

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

## **Applications**

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

### 532/780nm PM fiber Fused WDM

DK Photonics' short wavelength PM Fiber Fused wavelength division multiplexers (WDMs), also known as Fiber Combiners, consist of two separate input fibers that each accept a different wavelength of light and a single, common output fiber accepting both input wavelengths. Designed for laser lines commonly used in life science applications, these fused WDM are ideal for dual-color fluorescence imaging using confocal microscopy or laser scanning microscopy setups. DK Photonics also offers fused WDM with a 780 nm channel that are designed for near-IR applications such as Raman microscopy. In total, up to 20 different combinations of combiners are available; please refer to the table to the right for a list of available combinations. Because fused WDM are reversible, they can also be used to split two colors entering the common port into two separate output ports.



# For more Info

### Please contact us at:

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E-mail: sales@dkphotonics.com

https://www.dkphotonics.com

#### Add.:

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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





### **Performance Specifications**

Parameter	Unit	Vaules		
Operating wavelength	nm	532 / 780		
Operating bandwidth	nm	±5		
Insertion loss	dB	≤1.00		
Isolation	dB	≥15		
PER	dB	≥18		
Return Loss	dB	≥55		
Fiber Type	-	PM630-HP		
Maximum Power Handling	mW	100 mW (With Connectors or Bare Fiber),250 mW (Spliced)		
Operating temperature	$^{\circ}$ C	-40 ~ +85		
Storage Temperature	$^{\circ}$ C	-50 ~ +85		
Package Dimension	mm	Φ3.0×60(bare fiber), or Φ3.0×70(900μm loose tube)		

- 1. Other wavelengths can also be customized according to requirements.
- 2. Above specifications are for device without connector, and the PM fused coupler is both axis working, no axis can be blocked; default test extinction ratio is on the slow axis. All parameters are tested at room temperature at central wavelength only.
- 3. For devices with connectors, IL will be 1.5dB higher, RL will be 5dB lower and ER will be 2dB lower. The default connector key is aligned to slow axis.

### Order information P/N: PMFBTWDM-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>
Port	Wavelength	Pigtails Diameter	Fiber Length	Connector
102:1x2	532/780	25:250µm	05:0.5m	00: None
		90:900µm	10:1.0m	FP: FC/PC
		XX: Others	15:1.5m	FA: FC/APC
			XX: Others	XX: Others

Part Number Example: PMFBTWDM-102-532/780-25-10-00

**Description:** 1x2 532/780nm PM fiber fused WDM, PM630-HP fiber, bare fiber, 1.0m length fiber pigtails, without connectors at all ports.

# **Ordering Information for Custom Parts**

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