



# **Key Features**

- Wavelength 400 750 nm Available
- Coupling Ratio from 1/99 to 50/50 Available
- Low Excess Loss
- High Stability and Reliability
- Special Wavelengths WDM also Available

# **Applications**

- Fiber Optic Instruments
- Fiber Amplifiers
- Power Monitoring
- Fixed Attenuation
- Testing Instruments

# 1x2(2x2) 680nm PM fiber Fused Coupler

DK Photonics uses unique fusing technique to build the 400~750nm PM fiber fused coupler. The coupling ratio could be selected according to customer's request. It features low excess loss, small size and high polarization extinction ratio.

If you do not see a standard PM Fused Coupler that meets your needs, we welcome the opportunity to review your desired specification and quote a custom PM fused Coupler. Requests for custom fiber pigtails, different wavelengths, tap Ratio and handling power of operation or other specific needs will be readily addressed.



## **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.

# For more Info

#### Please contact us at:

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#### Add.:

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# 1x2(2x2) 680nm PM fiber Fused Coupler

# **Performance Specifications**

Parameter	Unit	Values		
Configuration	-	1x2 or 2x2		
Center Wavelength	nm	680		
Wavelength Range	nm	±10		
Coupling Ratio	%	1~50		
Typ. Excess Loss	dB	0.6		
Min. PER	dB	18		
Min. Return Loss	dB	55		
Max. Power Handling	mW	100 mW (With Connectors or Bare Fiber),250 mW (Spliced)		
Max. Tensile Load	Ν	5		
Fiber Type	-	PM630-HP		
Operating Temperature	°C	-10 ~ +75		
Storage Temperature	°C	-40 ~ +85		
Dimensions (Φ×L)	mm	Φ3.0×54, or Φ3.0×60		

1. 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.

2.ER data listed in the table are for the ports with coupling ratio greater than 10%. It will be 2 dB lower for a tap port with coupling ratio between 5-10%. For <5% tap port, ER is not considered if there is no requirement.

3.For devices with connectors, IL will be 1.0dB 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: PMFBTC-①-②-③-④-⑤-⑦

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	1
Port	Operating Wavelength	Coupling Ratio	Fiber type	Pigtail Diameter	Fiber Length	Connector
102:1x2 202:2x2	680:680nm XX: Others	50:50/5005:5/9540:40/6001:1/9920:20/80XX: Others10:10/90	P63: PM630-HP XXX: fiber name	25:250μm bare fiber 90:900μm Loose tube XX: Others	08:0.8m 10:1.0m XX: Others	00: None FP: FC/PC FA: FC/APC XX: Others

Part Number Example: PMFBTC-102-680-50-P63-25-10-00

**Description:** 680nm 1x2 PM Fiber Fused Coupler, 50:50 coupling ratio, 1.0m PM630-HP 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.