

## 520nm 1x2 2x2 PM Fiber Fused Coupler

520nm 1x2, 2x2 Polarization Maintaining (PM) Fused Coupler is built with fused biconical taper (FBT) technology, it can be used in split the optical signal power into two parts with even or various coupling ratio and keep the polarization maintaining, it's widely applied in fiber optic sensor, Quantum Communication and fiber optic diffraction field.

### Application:

Quantum Communication  
Fiber Optic Sensor  
Fiber Laser  
Optical Diffraction System

### Features:

Low Excess Loss  
Low Insertion Loss  
High Extinction Ratio  
High Reliability



### Specification:

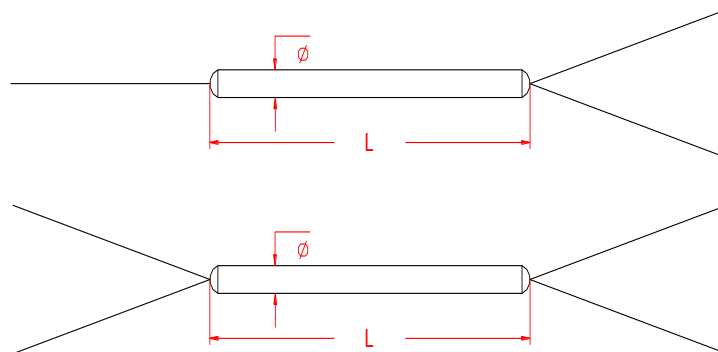
Parameter	Symbol	Value	Unit	
Center Wavelength	$\lambda$	520	nm	
Bandwidth	BW	$\pm 5$	nm	
Max. Excess Loss	EL	1.4	dB	
Max. Insertion Loss	IL	50/50 ( $\pm 3.5$ )	3.8/3.8	dB
		40/60 ( $\pm 2.5$ )	5.2/3.1	dB
		30/70 ( $\pm 2.5$ )	5.8/2.0	dB
		20/80 ( $\pm 2.0$ )	8.0/1.5	dB
		10/90 ( $\pm 1.2$ )	11.6/1.2	dB
		5/95 ( $\pm 0.8$ )	14.8/0.8	dB
		3/97 ( $\pm 0.7$ )	17.0/0.5	dB
		2/98 ( $\pm 0.6$ )	18.4/0.4	dB
1/99 ( $\pm 0.4$ )	22/0.35	dB		
Min. Extinction Ratio	ER	18	dB	
Min. Directivity		50	dB	
Min. Return Loss	RL	50	dB	
Fiber Type		Nufern PM460-HP Panda Fiber	-	
Max. Tensile Load		5	N	
Max. Optical Power (CW)	P	2	W	
Operating Temperature	T	-40~75	$^{\circ}\text{C}$	
Storage Temperature	T	-40~85	$^{\circ}\text{C}$	
Package Dimension		$\Phi 3.0 \times L54$	mm	

Notice: Above specifications are tested at center wavelength without connector in room temperature @23 $^{\circ}\text{C}$ .

For devices with connectors, IL will be 0.3dB higher, EL will be 0.2dB higher, ER will be 2dB lower, slow axis is default aligned to the connector key.

If need optical power more than 2W CW, please contact us to confirm. Connectors only 1W (Continue Wavelength) optical power guarantee.

### Drawing:



**Ordering Information (Part Number):****PMFUC-~~WWW~~-~~PP~~-~~A~~-~~RR~~-~~J~~-~~LL~~-~~CC~~**

<b>WWW</b>	<b>PP</b>	<b>A</b>	<b>RR</b>	<b>J</b>	<b>LL</b>	<b>CC</b>
<b>Wavelength</b>	<b>Port</b>	<b>Working Axis</b>	<b>Coupling Ratio</b>	<b>Fiber Jacket</b>	<b>Fiber Length</b>	<b>Connector</b>
501 - 501nm	12 - 1x2	B - Both Axes	01 - 1/99	B - 250um Bare Fiber	05 - 0.5m	NE - None
510 - 510nm	22 - 2x2	Working	02 - 2/98	9 - 900um Loose Tube	10 - 1.0m	FA - FC/APC
520 - 520nm		S - Slow Axis	03 - 3/97		15 - 1.5m	FU - FC/UPC
532 - 532nm		Working	05 - 5/95		20 - 2.0m	SA - SC/APC
540 - 540nm		F - Fast Axis	10 - 10/90		SS - Specify	SU - SU/APC
545 - 545nm		Working	20 - 20/80			LA - LC/APC
552 - 552nm			30 - 30/70			LU - LC/UPC
565 - 565nm			40 - 40/60			SS - Specify
SSS - Specify			50 - 50/50			
			SS - Specify			