

## 650nm 1x2 2x2 PM Fiber Fused Coupler

650nm 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, fiber amplifier system and fiber optic diffraction field.

### Application:

Fiber Optic Amplifier  
Fiber Optic Sensor  
Fiber Laser  
Optical Diffraction System

### Features:

Low Excess Loss  
Low Insertion Loss  
High Extinction Ratio  
High Reliability



### Specification:

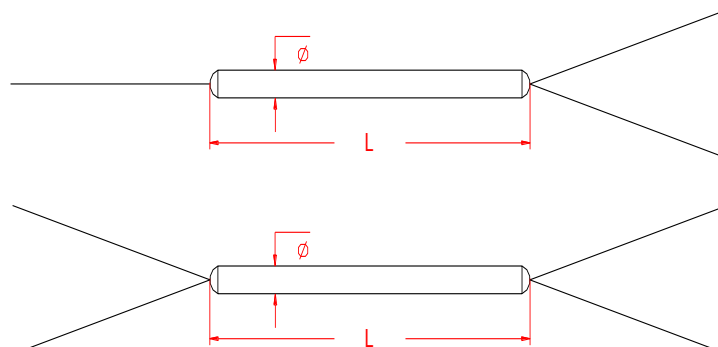
Parameter		Symbol	Value	Unit
Center Wavelength		$\lambda$	650	nm
Bandwidth		BW	$\pm 15$	nm
Max. Excess Loss		EL	1.4	dB
Max. Insertion Loss	50/50 ( $\pm 3.5$ )	IL	3.8/3.8	dB
	40/60 ( $\pm 2.5$ )		5.2/3.1	dB
	30/70 ( $\pm 2.5$ )		5.8/2.0	dB
	20/80 ( $\pm 2.0$ )		8.0/1.5	dB
	10/90 ( $\pm 1.2$ )		11.6/1.2	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	For Ratio > 10% Port	ER	20	dB
	For 5% $\leq$ Ratio $\leq$ 10% Port		18	dB
	For Ratio < 5% Port		16	dB
Min. Directivity			50	dB
Min. Return Loss		RL	50	dB
Fiber Type			Nufern PM630-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- <b>WWW-PP-A-RR-J-LL-CC</b>						
<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>
633 - 633nm	12 - 1x2	B - Both Axes	01 - 1/99	B - 250um Bare Fiber	05 - 0.5m	NE - None
638 - 638nm	22 - 2x2	Working	02 - 2/98	9 - 900um Loose Tube	10 - 1.0m	FA - FC/APC
650 - 650nm		S - Slow Axis	03 - 3/97		15 - 1.5m	FU - FC/UPC
680 - 680nm		Working	05 - 5/95		20 - 2.0m	SA - SC/APC
		F - Fast Axis	10 - 10/90		SS - Specify	SU - SU/APC
		Working	20 - 20/80		LA - LC/APC	
			30 - 30/70		LU - LC/UPC	
			40 - 40/60		SS - Specify	
			50 - 50/50			
			SS - Specify			