

## 830nm 1x2 2x2 SM Fiber Fused Coupler

830nm 1x2, 2x2 SM Fused Coupler is built with fused biconical taper (FBT) technology, optical signal power can be splitted into two parts with even or various coupling ratio by the FBT Coupler, it's widely applied in fiber optic transmission and fiber optic sensor field, the MM and PM types are available upon request.

### Application:

Optical Signal Transmission  
Fiber Optic Sensor  
Fiber Amplifier  
Optical Diffraction System

### Features:

Low Excess Loss  
High Return Loss  
Low Insertion Loss  
High Reliability



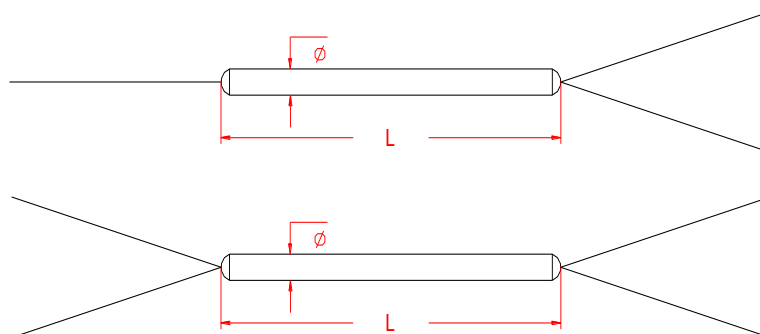
### Specification:

Parameter	Symbol	Value	Unit	
Center Wavelength	$\lambda$	830	nm	
Bandwidth	BW	$\pm 10$	nm	
Max. Excess Loss	EL	0.2	dB	
Max. Insertion Loss	IL	50/50	3.8/3.8	dB
		40/60	5.0/3.1	dB
		30/70	6.2/2.4	dB
		20/80	8.0/1.8	dB
		10/90	11.0/1.3	dB
		5/95	14.5/1.1	dB
		3/97	19.0/1.05	dB
		2/98	18/0.9	dB
		1/99	21.0/0.9	dB
Max. Polarization Dependent Loss	PDL	0.2	dB	
Min. Directivity		50	dB	
Min. Return Loss	RL	50	dB	
Fiber Type		HI 780, OFS980 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		$\Phi 3.0 \times L40$ for Bare Fiber $\Phi 3.0 \times L54$ for Bare Fiber or 900um Loose Tube 90x20x10 for 2.0 or 3.0mm Loose Tube 100x80x10 for 2.0 or 3.0mm Loose Tube	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, RL will be 5dB lower, Connectors only 1W CW optical power guarantee.

### Drawing:



**Ordering Information (Part Number):****SMFUC-~~WWW~~-~~PP~~-~~RR~~-~~FF~~-~~D~~-~~J~~-~~LL~~-~~CC~~**

<b>WWW</b>	<b>PP</b>	<b>RR</b>	<b>FF</b>	<b>D</b>	<b>J</b>	<b>LL</b>	<b>CC</b>
<b>Wavelength</b>	<b>Port</b>	<b>Coupling Ratio</b>	<b>Fiber Type</b>	<b>Package Dimension</b>	<b>Fiber Jacket</b>	<b>Fiber Length</b>	<b>Connector</b>
800 - 800nm	12 - 1x2	01 - 1/99	H7 - HI 780	1 - $\Phi$ 3.0x40mm	B - 250um Bare Fiber	05 - 0.5m	NE - None
808 - 808nm	22 - 2x2	02 - 2/98	O9 - OFS980	2 - $\Phi$ 3.0x54mm	9 - 900um Loose	10 - 1.0m	FA - FC/APC
810 - 810nm		03 - 3/97	SS - Specify	3 - 90x20x10mm	Tube	15 - 1.5m	FU - FC/UPC
820 - 820nm		05 - 5/95		4 - 100x80x10mm	2 - 2.0mm Loose	20 - 2.0m	SA - SC/APC
830 - 830nm		10 - 10/90			Tube	SS - Specify	SU - SU/APC
850 - 850nm		20 - 20/80			3 - 3.0mm Loose		LA - LC/APC
		30 - 30/70			Tube		LU - LC/UPC
		40 - 40/60					SS - Specify
		50 - 50/50					
		SS - Specify					