



Key Features

- Low Insertion Loss
- Low Polarization Dependent Loss
- All Split Ratios Available
- High stability & Reliability

Applications

- Fiber Laser
- Fiber amplifier
- Testing Instrumentations

1310nm Single-Mode Fused Coupler

DK Photonics single-mode fused coupler are used to split off a portion of light to allow for optical monitoring and feedback. These devices are used extensively in fiber amplifier power control, and in transmission equipment for performance monitoring and feedback control. Our ultra-low polarization dependent loss couplers offer low levels of sensitivity to polarization, enable more effective monitoring and management of optical networks. These couplers are available in a wide range of split ratios, lengths, and packaging. Custom terminations are also available.



For more Info

Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

E-mail: sales@dkphotonics.com https://www.dkphotonics.com

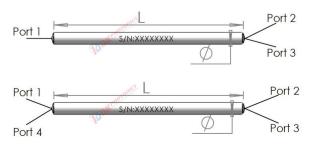
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

Dahe Road, Longhua Dis.,

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.







1310nm Single-Mode Fused Coupler

Performance Specifications

Parameter		Unit	Values				
Grade		-	Р	А			
Operating wavelength		nm	1310,1480,1550,1610, others on request				
Operating bandwidth		nm	± 15				
Typical excess loss		dB	0.07	0.10			
Insertion loss @ Coupling Ratio (%)	50/50	dB	≤3.4	≤3.6			
	45/55	dB	≤4.1/3.1	≤4.3/3.3			
	40/60	dB	≤4.4/2.6	≤4.7/2.8			
	35/65	dB	≤5.2/2.3	≤5.5/2.5			
	33/67	dB	≤5.4/2.2	≤5.7/2.3			
	30/70	dB	≤5.7/1.9	≤6.0/2.0			
	25/75	dB	≤6.6/1.7	≤7.0/1.8			
	20/80	dB	≤7.6/1.25	≤8.0/1.35			
	15/85	dB	≤9.2/1.0	≤9.6/1.2			
	10/90	dB	9.20~11.00/≤0.65	9.00~11.20/≤0.8			
	5/95	dB	12.00~14.20/≤0.4	11.75~14.45/≤0.5			
	3/97	dB	14.05~16.55/≤0.30	13.75~16.85/≤0.4			
	2/98	dB	15.70~18.50/≤0.25	15.35~18.85/≤0.35			
	1/99	dB	18.55~21.50/≤0.20	18.15~22.00/≤0.3			
PDL		dB	≤0.10	≤0.15			
Return Loss		dB	≥50				
Directivity		dB	≥55				
Max. Optical Power (CW)		W	0.5,2,5,10				
Fiber Type		-	SMF-28e or other				
Operating Temperature		$^{\circ}$ C	-20~+75				
Storage Temperature		$^{\circ}\!\mathbb{C}$	-40~+85				
Package Dimension		mm	Φ3x54(bare fiber), Φ3x60(0.9mm loose tube)				

^{1.} Above specifications are for device without connector.

Order information P/N: FBTC-①-②-③-④-⑤-⑥-⑦-⑧-⑨

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	\$	6	⑦	8	9
Grade	Port	Wavelength	Power Handling	Coupling Ratio(%)	Fiber Type	Pigtails Diameter	Fiber Length	Connector
P: P Grade A:A Grade	102:1x2 202:2x2	13:1310nm 14:1480nm 15:1550nm 16:1610nm XX: Others	L:<0.5W 2:2W 5:5W 10:10W 20:20W	50:50/50 40:40/60 30:30/70 20:20/80 10:10/90 05:5/95 02:2/98 01:1/99 XX: Others	S28: SMF-28e X: Others	25:250μm 90:900μm XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC XX: Others

Part Number Example: FBTC -P-102-13-L-50-S28-90-10-FA

 $\textbf{Description:}\ 1X2\ Single\ Mode\ Standard\ Coupler,\ 1310nm,\ P\ grade, 1x2,\ 0.5w\ handling\ power, 50:50,\ SMF-28e\ fiber,\ with\ 0.9mm\ OD\ loose\ tube, 1.0m\ length\ fiber\ pigtails,\ FC/APC\ connectors\ at\ all\ ports.$

Ordering Information for Custom Parts

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

^{2.} For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Powers transmit through the connector less than 2W.