

1610nm Single-Mode Fused Coupler

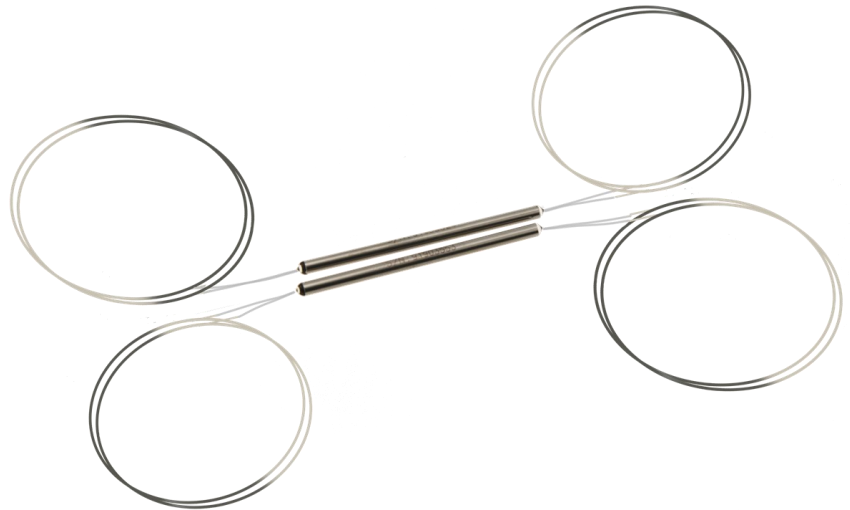
Key Features

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

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.

Applications

- Fiber Laser
- Fiber amplifier
- Testing Instrumentations



For more Info

Please contact us at:

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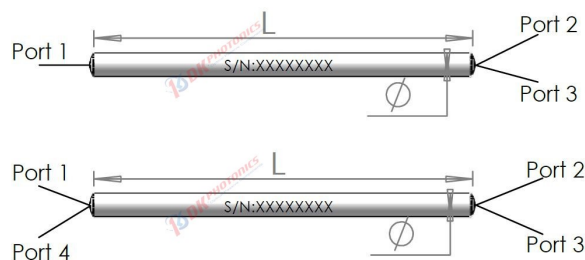
Add.:

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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.

1610nm Single-Mode Fused Coupler

Performance Specifications

Parameter	Unit	Values	
Grade	-	P	A
Operating wavelength	nm	1610, 1625, 1650, others on request	
Operating bandwidth	nm	± 15	
Typical excess loss	dB	0.07	0.10
	50/50	≤3.4	≤3.6
	45/55	≤4.1/3.1	≤4.3/3.3
	40/60	≤4.4/2.6	≤4.7/2.8
	35/65	≤5.2/2.3	≤5.5/2.5
	33/67	≤5.4/2.2	≤5.7/2.3
	30/70	≤5.7/1.9	≤6.0/2.0
Insertion loss @ Coupling Ratio (%)	25/75	≤6.6/1.7	≤7.0/1.8
	20/80	≤7.6/1.25	≤8.0/1.35
	15/85	≤9.2/1.0	≤9.6/1.2
	10/90	9.20~11.00/≤0.65	9.00~11.20/≤0.8
	5/95	12.00~14.20/≤0.4	11.75~14.45/≤0.5
	3/97	14.05~16.55/≤0.30	13.75~16.85/≤0.4
	2/98	15.70~18.50/≤0.25	15.35~18.85/≤0.35
	1/99	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	°C	-20~+75	
Storage Temperature	°C	-40~+85	
Package Dimension	mm	Φ3x54(bare fiber), Φ3x60(0.9mm loose tube)	

1. Above specifications are for device without connector.

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

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	⑤	⑥	⑦	⑧	⑨
Grade	Port	Wavelength	Power Handling	Coupling Ratio(%)	Fiber Type	Pigtails Diameter	Fiber Length	Connector
P: P	102:1x2	1610:1610nm	L:<0.5W	50:50/50	S28: SMF-28e	25:250μm	05:0.5m	00: None
Grade	202:2x2	1625:1625nm	2:2W	40:40/60	X: Others	90:900μm	10:1.0m	FP: FC/PC
A:A		1650:1650nm	5:5W	30:30/70		XX: Others	15:1.5m	FA: FC/APC
Grade		XX: Others	10:10W	20:20/80			XX: Others	SP: SC/PC
				10:10/90				SA: SC/APC
				05:5/95				LP: LC/PC
				02:2/98				LA: LC/APC
				01:1/99				XX: Others
				XX: Others				

Part Number Example: FBTC-P-102-1650-L-50-S28-90-10-FA

Description: 1X2 Single Mode Standard Coupler, 1650nm, 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.