



Polarization Insensitive Coupler (PIC)



Overview:

Coupler PDL affects optical system power distribution. When the tap coupler is used to monitor the optical system power, PDL will directly affect the measurement accuracy. LightComm uses special fiber fusing techniques to build these extremely low PDL couplers (minimum PDL < 0.01dB).

Features:

- * Low excess loss
- * Extremely low PDL
- * High stability and reliability

Applications:

- * EDFA
- * Optical communication systems
- * Testing instruments

Specification:

Parameter		Grade		
		U	P	A
Operating wavelength (nm)		1310 or 1550, others on request		
Operating bandwidth (nm)		±15		
Typical excess loss (dB)		0.1		
Insertion loss (dB)	50/50	< 3.6		
	40/60	< 4.7/2.8		
	30/70	< 6.0/2.0		
	20/80	< 8.0/1.8		
	10/90	< 11.5/0.8		
	5/95	< 14.8/0.5		
	2/98	< 19.0/0.35		
	1/99	< 22.0/0.3		
PDL (dB)	CR ≥ 10%	< 0.01	< 0.03	< 0.07
	CR < 10%	< 0.03	< 0.05	< 0.08
Directivity (dB)		> 55		
Operating temperature (°C)		- 40 ~ +85		

*Other specifications can be made on customer request.

Package Information:

Configuration	1×2 or 2×2		
Fiber lead length	1 meter, others on request		
Fiber type	250 μm bare fiber	900 μm loose tube	900 μm/2mm/3mm loose tube
Dimensions (φ × L)	φ 8.0mm × 54mm	φ 8.0mm × 70mm	90mm × 14mm × 8.5mm
	φ 2.4mm × 42mm	φ 8.0mm × 54mm	

*Other package dimensions can be made on customer request.

Ordering Information:

PIC-X-XXX-XXXX-XX/XX-X-X-XX/XXX-XX*XX

- └─ Package : 3.0×54 etc.
- └─ Connector : FC/UPC, FC/APC etc.
- └─ Fiber Type : 0=SMF-28, 1=flexcore,
2=50/125μm, 3=62.5/125μm, 4=others
- └─ Pigtail Type : 0=250μm, 1=900μm, 2=2mm,
3=3mm, 4=others
- └─ Coupling Ratio : 01/99, 50/50 etc.
- └─ Operating Wavelength : 131=1310nm, 155=1550nm,
1315=1310&1550nm etc.
- └─ Port Number : 1×2, 2×2etc.
- └─ Grade : U=Ultra, P=Perfect, A=Grade A, X=On customer request