

ULTRA-LOW PDL FUSED TAP COUPLER

LPTC Series

Features

- Wavelength Independent
- Ultra Low Polarization Dependent Loss
- High Directivity
- Highly Stable & Reliable

Applications

- Telecommunications
- CATV
- Network Monitoring
- Local Area Network

ULTRA-LOW PDL FUSED TAP COUPLER

Oplink's LPTC coupler series feature exceptionally low polarization dependent loss on both signal and tap ports (detail see performance specifications below). This product is ideal for applications that have tight PDL budgets

Performance Specifications

LPTC Series (1x2, 2x2)		Premium	Grade A	Unit
Coupling Ratio		1/99 to 50/50		
Operating Wavelength		1270-1350 or 1510-1590 or 1600-1640		nm
Uniformity (50/50)		≤0.5	≤0.8	dB
Directivity		≥55		dB
Optical Power Tolerance		500		mW
Insertion Loss	Split Ratio: 50/50	≤3.4	≤3.7	
Insertion Loss	Split Ratio: 45/55	< 3.8/2.9	< 4.0/3.0	
Insertion Loss	Split Ratio: 40/60	< 4.4/2.5	< 4.6/2.8	
Insertion Loss	Split Ratio: 35/65	< 4.9/2.1	< 5.0/2.2	
Insertion Loss	Split Ratio: 30/70	< 5.6/1.8	< 6.0/2.0	
Insertion Loss	Split Ratio: 25/75	< 6.5/1.5	< 6.7/1.6	
Insertion Loss	Split Ratio: 20/80	< 7.5/1.2	< 7.7/1.3	
Insertion Loss	Split Ratio: 15/85	< 8.8/0.9	< 9.0/1.0	
Insertion Loss	Split Ratio: 10/90	< 11.0/0.6	< 11.2/0.7	
Insertion Loss	Split Ratio: 5/95	< 13.8/0.45	< 14.5/0.55	
Insertion Loss	Split Ratio: 3/97	< 16.2/0.35	< 17.0/0.45	
Insertion Loss	Split Ratio: 2/98	< 16.8 - 19.0/0.32	< 17.0 - 19.5/0.35	
Insertion Loss	Split Ratio: 1/99	19.0 - 21.0 / 0.1 - 0.2	< 21.5/0.25	
Polarization Dependent Loss		< 0.03	< 0.05	dB
Temperature Sensitivity		< 0.002	< 0.002	dB/°C
Operating Temperature		-10 to +70		°C
Storage Temperature		-40 to +85		°C
Package Dimension *		P1: 250 μm SMF-28 fiber	(ø)3.0 x (L)54	mm
		P2: 900 μm loose tube	(ø)3.0 x (L)60	
		P3: 3mm cable	(L)96 x (W)12 x (H)6.4	

Values are referenced without connector loss.

* The mechanical tolerance should be +/- 0.2 mm on all package dimensions unless otherwise custom specified.

Ordering Information

LPTC	5					0	0				
Wavelength	Type	Tap Ratio	Grade	Package Type	Fiber Length	Connector Type					
1550 nm=5	1x2=1 2x2=2	50/50=50 40/60=40 30/70=30 20/80=20 10/90=10 5/95=05 3/97=03 2/98=02 1/99=01	P Grade=P A Grade=A	P1=1 P2=2 P3=3	1 Meter=1*** 1.5 Meters=5 2 Meters=2	None=1 FC/PC=2 FC/SPC=3 FC/APC=4 SC/PC=5 SC/SPC=6 SC/APC=7 ST=8 LC=9 MU=A					
					Fiber Type						
					250 μm SMF-28=1 (P1) 900 μm loose tube=2*(P2) 3 mm cable=3**(P3)						

Note:

- * Use P2 package only
- ** Use P3 package only
- *** 1 meter is standard. The lead time for special fiber length will be longer.