

Mini Size Wide Band Coupler (WBC)

Description

LightComm uses bandwidth expanding techniques (asymmetric techniques) to build the wide band coupler (WBC). The WBC has an operating bandwidth of $\pm 40\text{nm}$, low excess loss and PDL.

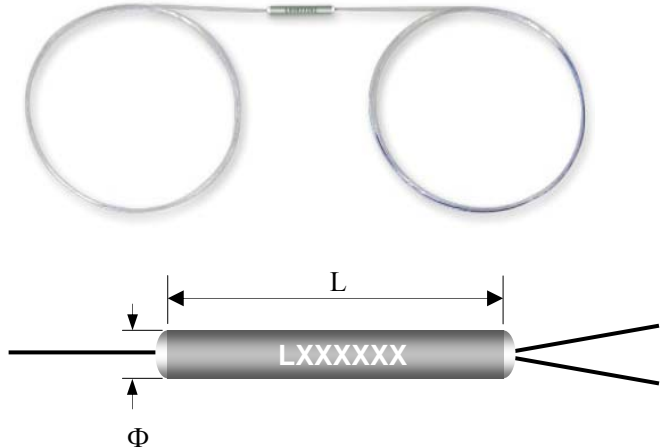
The mini size WBC is designed for the compact optical modules and communication systems.

Features

- Mini size
- Low excess loss
- Low PDL and low WDL
- High stability and reliability

Applications

- Mini size EDFA
- Mini size transmitter/receiver module
- Optical communication systems
- Testing instruments



Specifications

Parameter		Mini Size Wide Band Coupler (WBC)			
Operating wavelength (nm)		1310 or 1550, others on request			
Operating bandwidth (nm)		± 40			
Package size ($\Phi \times L$) mm		$\Phi 3.0/\Phi 2.4 \times 30$		$\Phi 2.4 \times 25$	
Grade		P	A	P	A
Typical excess loss (dB)		0.10	0.15	0.15	0.25
Insertion loss (dB)	50/50	≤ 3.50	≤ 3.70	≤ 3.60	≤ 3.80
	40/60	$\leq 4.50/2.70$	$\leq 4.80/2.90$	$\leq 4.60/2.80$	$\leq 4.90/3.00$
	30/70	$\leq 5.80/2.00$	$\leq 6.10/2.10$	$\leq 5.90/2.10$	$\leq 6.30/2.20$
	20/80	$\leq 7.70/1.25$	$\leq 8.00/1.30$	$\leq 7.8/1.30$	$\leq 8.20/1.40$
	10/90	9.55~ 10.85/ ≤ 0.70	9.25~ 11.15/ ≤ 0.85	9.60~ 10.90/ ≤ 0.75	9.30~ 11.20/ ≤ 0.85
	5/95	12.40~ 14.00/ ≤ 0.45	12.10~ 14.35/ ≤ 0.55	12.45~ 14.05/ ≤ 0.5	12.15~ 14.40/ ≤ 0.55
	3/97	14.50~ 16.35/ ≤ 0.35	14.10~ 16.75/ ≤ 0.45	14.55~ 16.40/ ≤ 0.40	14.15~ 16.80/ ≤ 0.45
	2/98	16.15~ 18.25/ ≤ 0.30	15.65~ 18.70/ ≤ 0.35	16.20~ 18.30/ ≤ 0.35	15.70~ 18.75/ ≤ 0.40
	1/99	19.05~ 21.35/ ≤ 0.25	18.55~ 21.85/ ≤ 0.30	19.10~ 21.40/ ≤ 0.30	18.60~ 21.90/ ≤ 0.35
PDL (dB)		≤ 0.1	≤ 0.15	≤ 0.1	≤ 0.15
Directivity (dB)		≥ 50			
Operating temperature ($^{\circ}\text{C}$)		-40 ~ +85			
Configuration		1 \times 2 or 2 \times 2			
Fiber lead length		1 meter, others on request			

*The above specification is without connector.

**Other specifications can be made on customer request.

Ordering Information

WBC-X-XXX-XXX-XX/XX-X-X-XX/XXX-XX*XX

