

Wide Band Coupler (WBC)

Description

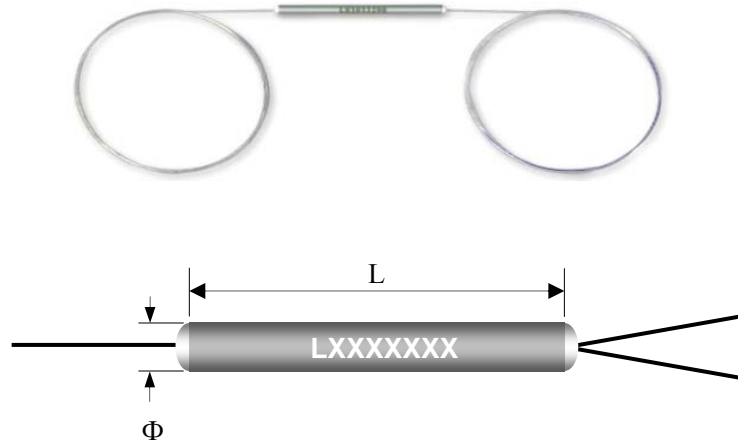
Lightcomm uses unique bandwidth expanding techniques (asymmetric techniques) to build the wide band coupler (WBC). The WBC has an operating bandwidth of $\pm 40\text{nm}$ or EDFA C band or L band, and it features low excess loss and low wavelength depend loss (WDL).

Key Features

- Low excess loss
- Low PDL
- High stability and reliability

Applications

- CATV
- LAN
- Optical fiber sensors
- Testing instruments



Specifications

Parameter	Grade	P		A	
		P	A	P	A
Operating wavelength (nm)		1310 ,1550 or C+L Band		C Band or L Band	
Operating bandwidth (nm)		± 40		1528 ~1565 or 1570 ~1605	
Typical excess loss (dB)		0.07	0.10	0.07	0.10
Insertion loss (dB)	50/50	≤ 3.4	≤ 3.6	≤ 3.35	≤ 3.5
	45/55	$\leq 4.1/3.1$	$\leq 4.3/3.3$	$\leq 4.0/3.0$	$\leq 4.2/3.2$
	40/60	$\leq 4.4/2.6$	$\leq 4.7/2.8$	$\leq 4.4/2.55$	$\leq 4.6/2.7$
	35/65	$\leq 5.2/2.3$	$\leq 5.5/2.5$	$\leq 5.1/2.2$	$\leq 5.3/2.4$
	33/67	$\leq 5.4/2.2$	$\leq 5.7/2.3$	$\leq 5.3/2.1$	$\leq 5.5/2.25$
	30/70	$\leq 5.7/1.9$	$\leq 6.0/2.0$	$\leq 5.7/1.85$	$\leq 5.9/1.95$
	25/75	$\leq 6.6/1.7$	$\leq 7.0/1.8$	$\leq 6.5/1.65$	$\leq 6.8/1.75$
	20/80	$\leq 7.6/1.25$	$\leq 8.0/1.3$	$\leq 7.55/1.25$	$\leq 7.8/1.3$
	15/85	$\leq 9.2/1.0$	$\leq 9.6/1.2$	$\leq 9.0/1.0$	$\leq 9.3/1.1$
	10/90	9.55~10.65/ ≤ 0.65	9.3~10.9/ ≤ 0.8	9.55~10.60/ ≤ 0.65	9.35~10.85/ ≤ 0.8
	5/95	12.40~13.80/ ≤ 0.4	12.10~14.10/ ≤ 0.5	12.45~13.75/ ≤ 0.4	12.15~14.05/ ≤ 0.45
	3/97	14.50~16.15/ ≤ 0.3	14.15~16.50/ ≤ 0.4	14.55~16.10 / ≤ 0.3	14.20~16.45/ ≤ 0.35
	2/98	16.10~18.05/ ≤ 0.25	15.70~18.45/ ≤ 0.35	16.2~17.95/ ≤ 0.25	15.80~18.35/ ≤ 0.3
1/99	19.05~21.15/ ≤ 0.2	18.55~21.65/ ≤ 0.3	19.1~21.1 / ≤ 0.2	18.65~21.55/ ≤ 0.3	
PDL (dB)		≤ 0.10	≤ 0.15	≤ 0.10	≤ 0.15
Directivity (dB)		≥ 55			
Operating temperature ($^{\circ}\text{C}$)		-40 ~ +85			

*The above specification is without connector.

**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	250μm bare fiber	900μm loose tube	900μm/2mm/3mm loose tube
Dimensions (Φ×L)	Φ3.0mm×54mm	Φ3.0mm×54mm	90mm×14mm×8.5mm
	Φ2.4mm×42mm		

*Other package dimensions can be made on customer request.

Ordering Information

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

