

Mini Size Dual Window Coupler (DWC)

Description

Dual window coupler (DWC) is built by asymmetric coupling technique. The operating bandwidth of this coupler is expanding to $\pm 40\text{nm}$. The DWC coupler has the same coupling ratio on both 1310nm and 1550nm communication windows.

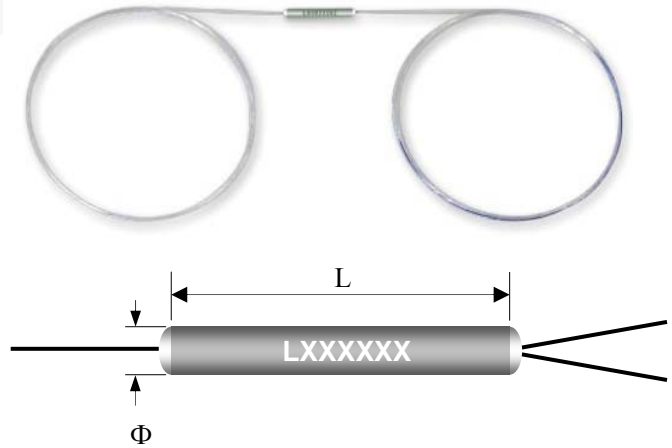
The mini size DWC is designed for the compact optical modules and communication systems.

Features

- Low insertion loss
- Mini size
- Low excess loss
- Low PDL
- Dual operating window
- High stability and reliability

Applications

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



Specifications

Parameter					
Operating wavelength (nm)		1310 and 1550			
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)		0.1	0.15	0.15	0.25
Insertion loss (dB)	50/50	≤ 3.60	≤ 3.80	≤ 3.70	≤ 3.90
	40/60	$\leq 4.70/2.70$	$\leq 4.90/2.90$	$\leq 4.70/2.80$	$\leq 5.00/3.00$
	30/70	$\leq 6.00/1.90$	$\leq 6.30/2.10$	$\leq 6.10/2.10$	$\leq 6.40/2.20$
	20/80	$\leq 7.90/1.30$	$\leq 8.40/1.40$	$\leq 8.00/1.40$	$\leq 8.50/1.50$
	10/90	9.20~ 11.30/ ≤ 0.75	8.75~ 12.00/ ≤ 0.80	9.25~ 11.50/ ≤ 0.80	8.80~ 12.00/ ≤ 0.85
	5/95	12.05~ 14.35/ ≤ 0.40	11.55~ 14.85/ ≤ 0.50	12.10~ 14.40/ ≤ 0.50	11.60~ 14.90/ ≤ 0.55
	3/97	14.10~ 16.70/ ≤ 0.35	13.55~ 17.25/ ≤ 0.45	14.15~ 16.75/ ≤ 0.40	13.60~ 17.30/ ≤ 0.45
	2/98	15.75~ 18.65/ ≤ 0.30	15.10~ 19.25/ ≤ 0.40	15.80~ 18.70/ ≤ 0.35	15.15~ 19.30/ ≤ 0.40
	1/99	18.60~ 21.80/ ≤ 0.25	17.90~ 22.50/ ≤ 0.35	18.65~ 21.85/ ≤ 0.30	17.95~ 22.55/ ≤ 0.35
PDL (dB)		≤ 0.15	≤ 0.2	≤ 0.15	≤ 0.2
Directivity (dB)		≥ 55			
Operating temperature ($^{\circ}\text{C}$)		-40~+85			
Configuration		1×2 or 2×2			
Fiber lead length		1 meter, others on request			

*The above specification is without connector

**Other specifications can be made on customer request.

Ordering Information

DWC-X-XXX-XXX-XX/XX-X-X-XX/XXX-XX*XX

