

Three-Window Coupler (TWC)

Description

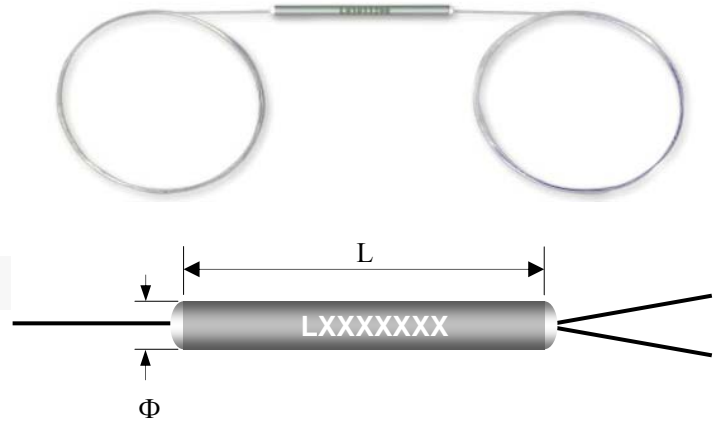
Built by asymmetric coupling technique, TWC operating bandwidth is expanding to 1310nm, 1490nm and 1550nm three communication windows. The TWC coupler has the same coupling ratio on 1310, 1490 and 1550nm communication windows, with low excess loss and low PDL. TWC is widely used for communication systems, CATV, FTTH, where multiple optical signals pass through single fiber.

Key Features

- Low excess loss
- Low PDL
- Three operating windows
- High stability and reliability

Applications

- Optical communication systems
- CATV
- FTTH



Specifications

Parameter		Grade	P	A
Operating wavelength (nm)		1310,1490 and 1550		
Operating bandwidth (nm)		1310 ± 40,1490 ± 10 and 1550 ± 40		
Typical excess loss (dB)		0.07		0.10
Insertion loss (dB)	50/50	≤3.6		≤3.8
	45/55	≤4.2/3.2		≤4.4/3.4
	40/60	≤4.7/2.7		≤4.9/2.9
	35/65	≤5.4/2.4		≤5.7/2.6
	33/67	≤5.7/2.2		≤6.0/2.4
	30/70	≤6.0/1.9		≤6.3/2.1
	25/75	≤7.0/1.7		≤7.3/1.9
	20/80	≤7.9/1.3		≤8.4/1.4
	15/85	≤9.5/1.0		≤10.0/1.2
	10/90	9.20~11.00/≤0.75		8.80~11.40/≤0.8
	5/95	12.05~14.20 /≤0.4		11.55~14.65/≤0.5
	3/97	14.10~16.50/≤0.35		13.60~17.05/≤0.45
	2/98	15.60~18.55/≤0.3		15.00~19.20/≤0.4
1/99	18.45~21.70/≤0.25		17.80~22.40/≤0.35	
PDL (dB)		≤0.15		≤0.20
Directivity (dB)		≥55		
Operating temperature (°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

TWC-X-XXX-XXX-XX/XX-X-X-XX/XXX-XX*XX

