



1310/1550nm Wavelength Division Multiplexer (WDM)



Overview:

1310/1550nm WDM can be used to combine or split 1310nm and 1550nm optical signals, which double the fiber transmission capability and ensure bi-direction communication in the single fiber. It is widely used for fiber communication systems upgrading to expand the system capacity.

The isolation of regular 1310/1550nm WDM couplers are usually about 17dB within ± 15 nm bandwidth. Lightcomm offers monolithic HWDM coupler with isolation higher than 30 dB. The HWDM can replace the high isolation WDM coupler modules. It features high isolation and the compact package size.

Features:

- *Low insertion loss
- * Low PDL
- * High isolation
- * High stability and reliability

Applications:

- * WDM systems
- * CATV

Specification:

Parameter	Type	Normal			Monolithic High Isolation	
	Operating wavelength (nm)		1310 and 1550			
Operating bandwidth (nm)		±15				
Grade		U	P	A	P	A
Insertion loss (dB)		<0.1	<0.2	<0.3	<0.4	<0.6
Isolation (dB)		>17	>17	>16	>32	>30
PDL (dB)		<0.05	<0.05	<0.1	<0.1	<0.15
Directivity (dB)		>55				
Operating temperature (°C)		-40 ~ +85				

*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		250 μm bare fiber	900 μm loose tube	900 μm/2mm/ 3mm loose tube
Dimensions (φ × L)	The Normal	φ 3.0mm × 54mm	φ 3.0mm × 70mm	90mm × 14mm × 8.5mm
		φ 2.4mm × 42mm	φ 3.0mm × 54mm	
	The Monolithic High Isolation	φ 4.0mm × 75mm		/

*Other package dimensions can be made on customer request.

Ordering Information:

WDM-X-XXX-XXX-X-X-XX/XXX-XX*XX

- └─ Package : 3.0x54 etc.
- └─ Connector : FC/UPC, FC/APC etc.
- └─ Fiber Type : 0=SMF-28, 1=flexcore,
2=50/125μm, 3=62.5/125μm,4=others
- └─ Pigtail Type : 0=250μm, 1=900μm, 2=2mm,
3=3mm, 4=others
- └─ Operating Wavelength : 131=1310nm, 155=1550nm,
1315=1310&1550nm etc.
- └─ Port Number : 1x2, 2x2 etc.
- └─ Grade : U=Ultra,P=Perfect, A=Grade A, X=On customer request