



SHENZHEN OPTICO COMMUNICATION

CWDM4 Mux and Demux Specification

Specifications

Characteristics

- » High Reliability
- » Low Insertion
- » RoHS Compliant
- » Low Temperature Correlation

Application

- » Data Center and QSFP Modules

Product Type & Dimension

Fig.1 MUX with LC Stub and Receptable

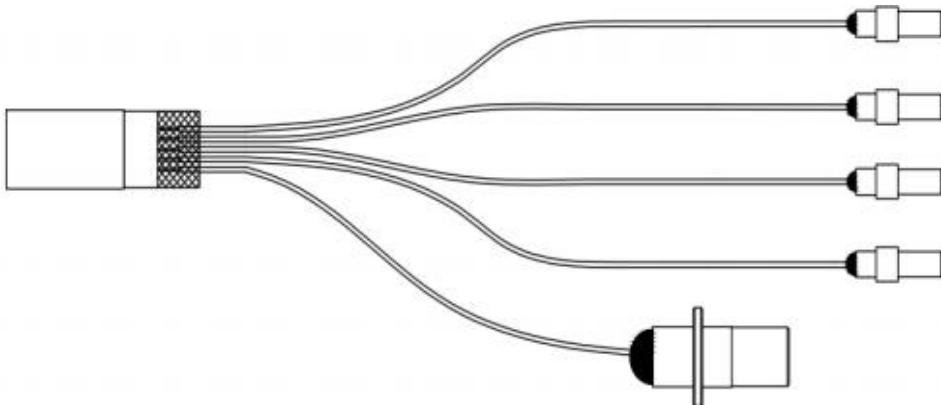


Fig.2 Demux with LC Receptable





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Note: fiber length , fiber type, LC stub and receptacle can be customized.

Parameter

Item	Condition/Measure Method	Symbol	Unit	Type	
				Mux	Demux
Channel		CH		4	
Spacing		Spc	nm	20	
CWL	25°C@3dB Center	λ C	nm	CH1: 1271	
				CH2: 1291	
				CH3: 1311	
				CH4: 1331	
CWL Accuracy	25°C@3dB Center	$\Delta\lambda$ C	nm	± 1	
1dB Bandwidth		BW1dB	nm	≥ 12	≥ 12
3dB Bandwidth		BW3dB	nm	≥ 15	≥ 15
Channel Uniformity	All channel ILmax-ILmin	Unit 1	dB	≤ 0.7	
Chip Uniformity	All chip ILmax-ILmin	Unit 2	dB	≤ 2	/
Insertion Loss	@Passband ± 5 nm; Including PDL and fiber coupling	IL	dB	2~3.5	≤ 2.5
Polarization Dependent Loss	Passband ± 1 nm	PDL	dB	≤ 0.5	
Ripple	Passband ± 5 nm	R	dB	≤ 1.0	
Return Loss		RL	dB	≥ 40	
Isolation (Adjacent)	Passband ± 6.5 nm	Iso	dB	/	≥ 20
Isolation (Non-Adjacent)	Passband ± 6.5 nm	Iso	dB	/	≥ 20
Polarization Mode Dispersion		PMD	PS	≤ 0.15	≤ 0.15
Temperature Dependent Loss	-50~+85°C	TDL	dB	≤ 0.2	≤ 0.2
Wavelength thermal stability		WTS	Nm/°C	≤ 0.012	/
Channel Pitch			um	500	250



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Input/Output Side				Identical Side	Opposite Side
Chip Size	Max Size		mm	≤7.6*4.0	≤10.2*1.6
Chip Height			mm	≤1.3	≤1.0
Operating Temperature			°C	-5~+80	
Storage Temperature			°C	-40~+85	