

CWDM Mux/Demux Module

Coarse wavelength division multiplexer (CWDM) is a low-cost WDM transmission technology for metro and access networks. In principle, CWDM is to use optical multiplexer to multiplex optical signals of different wavelengths into a single fibre for transmission. At the receiving end of the link, with the help of demultiplexer, the mixed signals in the fibre are decomposed into signals of different wavelengths and connected to the corresponding receiving equipment. Using thin film filter technology, it has the characteristics of high isolation and high reliability.

Characteristics

- Low insertion loss, high isolation
- Excellent thermal stability
- Telcordia compliant
- RoHS compliant

Applications

- CWDM system
- Metro and Access networks
- CATV



Specifications

Parameters	Index				
Center Wavelength, λ_c (nm)	1271 - 1611				
Channel Pass Band (nm)	± 7.0				
Pass Band@3dB (nm)	≥ 15				
Center Wavelength Offset (nm)	$\leq \pm 1.0$				
Channel Spacing (nm)	20				
Insertion Loss (dB)	4CH	6CH	8CH	12CH	16CH
	≤ 1.4	≤ 1.8	≤ 2.2	≤ 3.0	≤ 4.0
Pass Band Ripple (dB)	≤ 0.5				
Adjacent Channel Isolation(dB)	≥ 30				
Non-Adjacent Channel Isolation (dB)	≥ 40				
Polarization Dependent Loss (dB)	≤ 0.2				
Polarization Mode Dispersion (ps)	≥ 0.15				
Wavelength Temperature Stability (nm/°C)	≥ 0.002				
Temperature Dependent Loss (dB/°C)	≤ 0.007				
Return Loss (dB)	≥ 45				
Directivity (dB)	≥ 50				
Operating Temperature (°C)	-10 to +70				
Operating Humidity (%RH)	5 - 90				
Storage Temperature (°C)	-40 to +85				
Storage Humidity (%RH)	0 - 95				
Package Dimension (mm)	Customization				
Fiber Type	G657.A1				
Adaptor Type	LC/UPC				