



General Information

Wavelength Division Multiplexers or Demultiplexers (WDM) combine or separate optical signals with different wavelengths. They are passive optical components for uni- or bidirectional operation. CWDM are multiplexer and/or demultiplexer which are used to combine or separate signals with a center wavelength spacing of 20nm. By using up to 18 separate transmission channels CWDMs support the cost-efficient multiplication of the transmission capacity over an optical fiber.

Features

- Low insertion loss and high isolation
- High return loss

- High thermal, mechanical and environmental stability to meet the requirements of Telcordia GR-1209 and GR-1221
- Option of manufacture to customer specifications

Applications

- CWDM transmission systems
- Link monitoring
- Add-Drop-Multiplexing
- Metropolitan networks
- CATV systems

Designs

- Supplied in various housing sizes with buffered tube pigtailed or reinforced cable pigtailed
- All connector standard types are available

Optical parameters for standard CWDM filters ⁽¹⁾					
	1- channel CWDM	4- channel CWDM	8- channel CWDM	16- channel CWDM	18- channel CWDM
Parameters	Value				
Center wavelength ⁽²⁾ [nm]	ITU -T G.694.2				
Channel spacing [nm]	20				
Bandwidth [nm]	≥13				
Max. Insertion Loss ^(3, 4) [dB]	0,6	3,0	3,8	5,3	6,0
Min. Isolation [dB]	30				
Max. Ripple [dB]	0,3				
Min. Return Loss [dB]	45				
Polarisation Dependent Loss (PDL) [dB]	0,1	0,2	0,2	0,2	0,2
Temperature Range [°C]	Operation ⁽⁵⁾				
	Storage/Transportation				
Temperature Dependent Loss (TDL) [dB/°C]	≤0,005	≤0,005	≤0,01	≤0,01	≤0,01
Thermal wavelength change [nm/°C]	≤0,003	≤0,003	≤0,005	≤0,005	≤0,005
Max. Input Power [mW]	500				

⁽¹⁾ Configurations with additional upgrade channel available
⁽²⁾ All center wavelengths according to ITU-T G.694.2 (CWDM Grid) available
⁽³⁾ Lower values for selected wavelength configurations available
⁽⁴⁾ Lower values at room temperature, exact values at room temperature on request
⁽⁵⁾ Depending on pigtail type, values apply to pigtails in fibre and tide buffered type

