

Mux/Demux Module 8 Ch



DATASHEET

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Features

- Compact
- High Reliability
- Low IL, PDL, WDL & TDL

Applications

- CATV
- Test

The CWDM module is made by fused fiber technology offering advantageous attributes of low cost, low insertion loss, and high stability. It comes with a matching pair. It is ideally suited for CATV links.

Couplers are highly efficient in splitting light with little loss, about 0.2dB per joint, but incur significant losses when combining lights; for example, a 50/50 coupler produces a 50% loss to each beam when combined. For beam-combining applications, search Combiner.

Specifications

Parameter	Min	Typical	Max	Unit
Channel Number		8		
Center Wavelength	1270		1619	nm
CWDM Channel Passband		-6.5		nm
Insertion Loss ^[1]		2	2.4	dB
Isolation (Adjacent Channel)			30	dB
Isolation (Non-Adjacent Channel)			40	dB
Passband Ripple			0.3	dB
Polarization Dependent Loss			0.1	dB
Polarization Mode Dispersion			0.1	ps
Maximum Optical Power			500	mW
Directivity			50	dB
Operating Temperature	-5		75	°C
Storage Temperature	-40		85	°C
Fiber Type		SM28e		
Package Dimension		90 x 76 x 8		mm

Notes:

[1]. Excluding connectors

Note: The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [\[click this link\]](#):



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Mechanical Footprint Dimensions (mm)

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information

Prefix	Channels	Start ITU	End ITU	Fiber Type	Fiber Cover	Fiber Length	Connector
CWDM-	8Chan = 08 Special = 00			SMF-28 = 1 Corning XB = 2 Draka BBE = 3 Special = 0	Bare fiber = 1 900um tube = 2 3mm tube = 3 Special = 0	0.25m = 1 0.5m = 2 1.0m = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 Duplex LC/PC = 8 LC/APC = A LC/UPC = U Special = 0

Application Notes

Fiber Core Alignment

Note that the minimum attenuation for these devices depends on excellent core-to-core alignment when the connectors are mated. This is crucial for shorter wavelengths with smaller fiber core diameters that can increase the loss of many decibels above the specification if they are not perfectly aligned. Different vendors' connectors may not mate well with each other, especially for angled APC.

Fiber Cleanliness

Fibers with smaller core diameters (<5 μm) must be kept extremely clean, contamination at fiber-fiber interfaces, combined with the high optical power density, can lead to significant optical damage. This type of damage usually requires re-polishing or replacement of the connector.

Maximum Optical Input Power

Due to their small fiber core diameters for short wavelength and high photon energies, the damage thresholds for device is substantially reduced than the common 1550nm fiber. To avoid damage to the exposed fiber end faces and internal components, the optical input power should never exceed 20 mW for wavelengths shorter 650nm. We produce a special version to increase the handling by expanding the core side at the fiber ends.