

## CWDM Filter

### Description

The Gigalight CWDM (Coarse Wavelength Division Multiplexing) filter is a single-channel CWDM device designed for cost-effective multi-wavelength CWDM network applications. It is based on the Thin Film Filter (TFF) technology and operates at 20nm channel spacing ITU Grid CWDM wavelengths from 1270nm to 1610nm. Gigalight provides a series of customized CWDM filters with  $1 \times 2$  port configuration to meet different requirements on operating wavelength, fiber type, fiber length, COM connector, Pass connector, and Reflect connector.

### Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓  $1 \times 2$  port filter CWDM with compact design
- ✓ Wide operating wavelength range
- ✓ High reliability and high stability
- ✓ Telcordia GR-1209-CORE-2001 compliant
- ✓ Telcordia GR-1221-CORE-1999 compliant
- ✓ ITU-T G.694.1 compliant
- ✓ RoHS-6 compliant (lead free)



### Applications

- ✓ Broadband Networks
- ✓ Optical Add/Drop Multiplexing
- ✓ Metro Networks
- ✓ CATV Systems

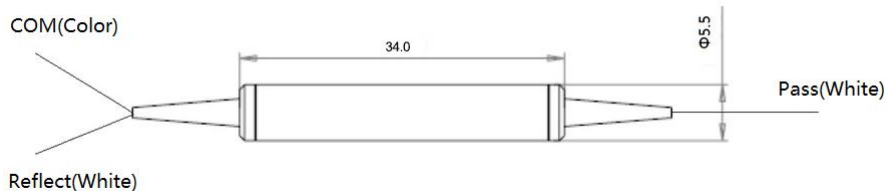
Parameters	1×2 Port CWDM Filter <sup>[1]</sup>
Channel Space (nm)	20
Center Wavelength (nm)	ITU Grid
Operating Wavelength (nm)	1260~1620
Channel Passband (nm)	ITU±6.5
Pass Band Insertion Loss (dB)	<0.6
Reflection Band Insertion Loss (dB)	<0.4
Pass Band Isolation (dB)	>30
Reflection Band Isolation (dB)	>12
Directivity (dB)	>50
Return Loss (dB)	>45
Ripple (dB)	<0.3
Polarization Dependent Loss (dB)	<0.1
Polarization Mode Dispersion (ps)	<0.1
Maximum Optical Power (mw)	300
Operating Temperature (°C)	-5 ~ 75
Storage Temperature (°C)	-40 ~ 85
Package (mm)(Φ×L)	250um bare fiber: 5.5×34 0.9mm tube fiber: 5.5×38

#### Note:

[1] All specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature. Fiber type is G657A1.

### Mechanical Dimensions

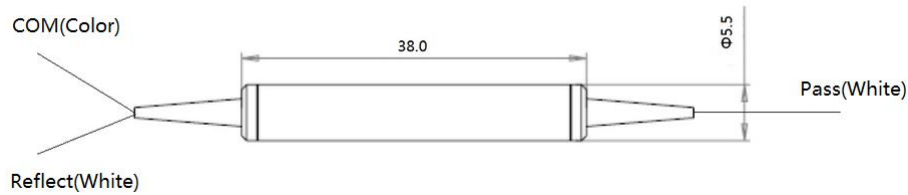
250um tube fiber (5.5×34):



# Passive Optical Components

## Data Sheet

0.9mm tube fiber (5.5 × 38):



### Ordering Information

GWD-02Q	xx	x	xx-	x	x	x
	Center Wavelength	Fiber Type	Fiber Length	COM Connector	Pass Connector	Reflect Connector
CWDM Filter (1×2 Port)	27=1270/1271	B=250um bare fiber	10=1.0m	0=None	0=None	0=None
	29=1290/1291	L=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC	1=FC/UPC
	31=1310/1311		20=2.0m	2=FC/APC	2=FC/APC	2=FC/APC
	...		25=2.5m	3=SC/UPC	3=SC/UPC	3=SC/UPC
	57=1570/1571		...	4=SC/APC	4=SC/APC	4=SC/APC
	59=1590/1591			5=LC/UPC	5=LC/UPC	5=LC/UPC
	61=1610/1611			6=LC/APC	6=LC/APC	6=LC/APC

Note :

If there is a demand for orders that are different from those described above, please contact Gigalight sales.

E-mail: [sales@gigalight.com](mailto:sales@gigalight.com)

Official Site: [www.gigalight.com](http://www.gigalight.com)