

Filter Wavelength Division Multiplexer (FWDM)

Features

- ✓ Low Insertion Loss (IL)
- ✓ High isolation
- ✓ Low Polarization Dependent Loss (PDL)
- ✓ 1x2 port WDM filter 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

- ✓ WDM Passive Optical Networks

Description

The Gigalight Filter Wavelength Division Multiplexer (FWDM), also known as WDM filter, is a bi-directional component used to combine and separate optical signals in a range of network applications. It is based on the Thin Film Filter (TFF) technology and operates at 1310nm/1490nm/1550nm band. Gigalight provides a series of customized single-channel WDMs with 1x2 port configuration to meet different requirements on Operating Wavelength, Fiber Type, Fiber Length, COM Connector, Pass Connector, and Reflect Connector.

Specifications

Parameters	Channel Options ¹						
	F1	F2	F3	F4	F5	F6	F7
Operating Wavelength (nm)	T13R15	T15R13	T13R1415	T14R1315	T15R1314	T1415R13	T1314R15
Pass Channel Wavelength (nm)	1310±40	1550±40	1310±40	1490±10	1550±10	1490±10 1550±10	1310±40 1490±10
Reflection Channel Wavelength (nm)	1550±40	1310±40	1490±10 1550±10	1310±40 1550±10	1310±40 1490±10	1310±40	1550±10
Pass Channel Insertion Loss (dB)	< 0.6						
Reflection Channel Insertion Loss (dB)	< 0.4						
Pass Channel Isolation (dB)	> 30						
Reflection Channel Isolation (dB)	> 15						
Directivity (dB)	> 50						
Return Loss (dB)	> 45						
Ripple (dB)	< 0.3						
Polarization Dependent Loss (dB)	< 0.1						

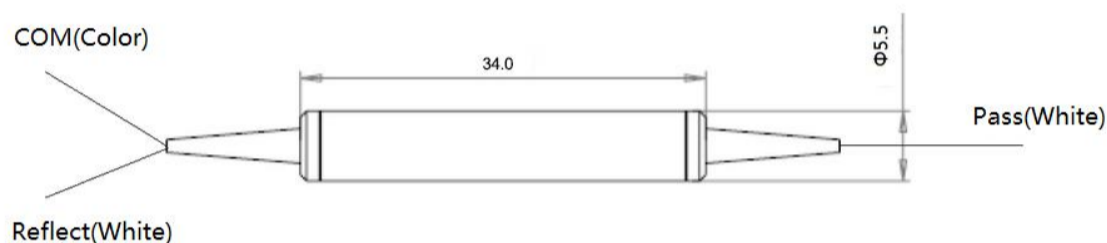
Polarization Mode Dispersion (ps)	< 0.1
Maximum Optical Power (mw)	300
Operating Temperature (°C)	-5 ~ 75
Storage Temperature (°C)	-40 ~ 85
Package (mm)(Φ×L)	250um bare fiber: 5.5×34 0.9mm tube fiber: 5.5×38

Notes:

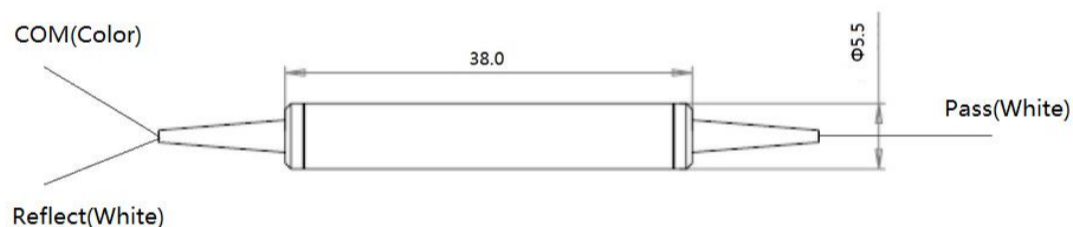
1. All specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature. Fiber type is G657A1.

Mechanical Dimensions

250um tube fiber (5.5×34):



0.9mm tube fiber (5.5×38):



Ordering Information

GWD-02F	xx	x	xx-	x	x	x
Channel Options (1x2 Port)	Center Wavelength	Fiber Type	Fiber Length	COM Connector	Pass Connector	Reflect Connector
	F1=T13R15	B=250um bare fiber	10=1.0m	0=None	0=None	0=None
	F2=T15R13	L=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC	1=FC/UPC
	F3=T13R1415		20=2.0m	2=FC/APC	2=FC/APC	2=FC/APC
	F4=T14R1315		25=2.5m	3=SC/UPC	3=SC/UPC	3=SC/UPC
	F5=T15R1314		...	4=SC/APC	4=SC/APC	4=SC/APC
	F6=T1415R13			5=LC/UPC	5=LC/UPC	5=LC/UPC
	F7=T1314R15			6=LC/APC	6=LC/APC	6=LC/APC

Notes:

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

E-mail: sales@gigalight.com

Official Site: www.gigalight.com