

Dense Wavelength Division Multiplexing (DWDM) Filter

Features

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

- ✓ DWDM Networks

Description

The Gigalight Dense Wavelength Division Multiplexing (DWDM) filter is designed for ITU channel spacing applications. It is based on the Thin Film Filter (TFF) technology and operates at 100GHz or 200GHz channel spacing ITU Grid DWDM wavelengths from 1526nm to 1565nm. Gigalight provides a series of customized DWDM filters with 1x2 port configuration to meet different requirements on Operating Wavelength, Fiber Type, Fiber Length, COM Connector, Pass Connector, and Reflect Connector.

Specifications

Parameters	1x2 Port DWDM Filter ¹	
Channel Space (GHz)	100	200
Center Wavelength (nm)	ITU Grid	
Center Wavelength Accuracy (nm)	±0.05	±0.1
Channel Passband (@-0.5dB) (nm)	0.22	0.5
Pass Band Insertion Loss (dB)	< 1.0	< 0.9
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 to +75	
Storage Temperature (°C)	-40 to +85	

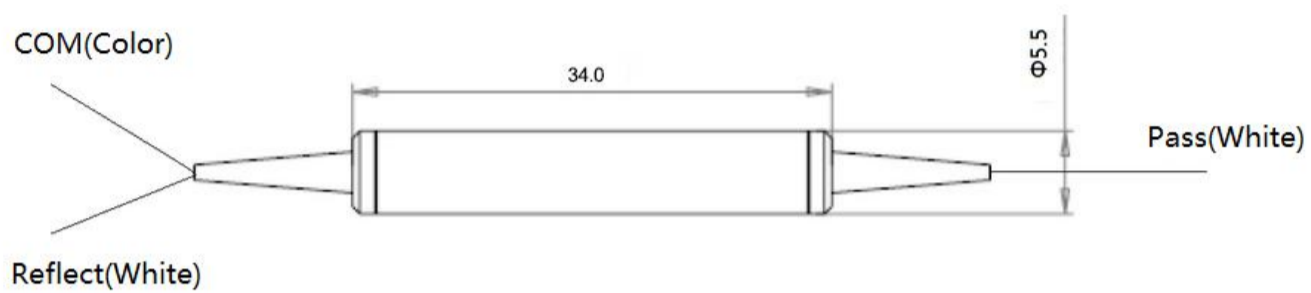
Package (mm)($\Phi \times L$)	250um bare fiber: 5.5×34 0.9mm tube fiber: 5.5×38
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Notes:

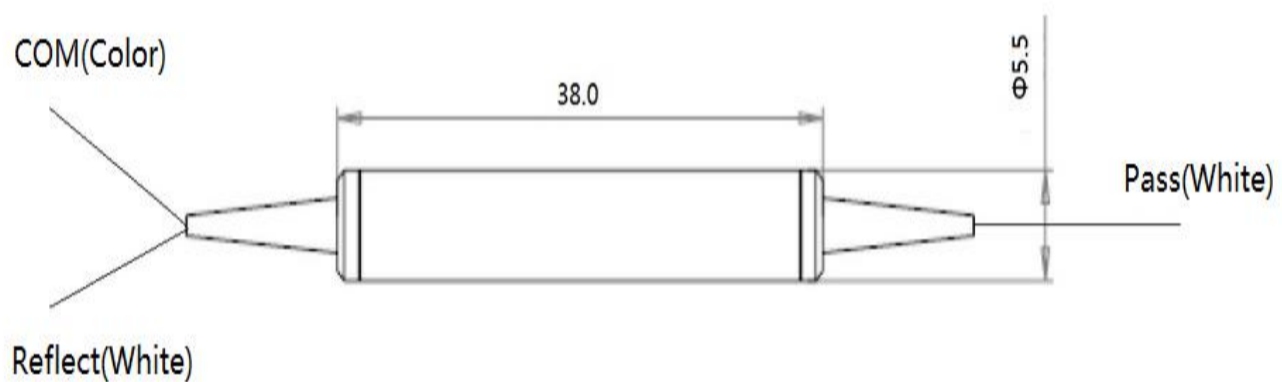
1. All specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature. Fiber type is G657A1.

Mechanical Dimensions

250um tube fiber (5.5×34):



0.9mm tube fiber (5.5×38):



Ordering Information

GWD-02	x	xx	x	xx-	x	x	x
DWDM Filter (1x2 Port)	Channel Space	Center Wavelength	Fiber Type	Fiber Length	COM Connector	Pass Connector	Reflect Connector
	X=100GHz	15=15CH	B=250um bare fiber	10=1.0m	0=None	0=None	0=None
	Y=200GHz	16=16CH	L=0.9mm loose tube	15=1.5m	1=FC/UPC	1=FC/UPC	1=FC/UPC
		17=17CH		20=2.0m	2=FC/APC	2=FC/APC	2=FC/APC
		...		25=2.5m	3=SC/UPC	3=SC/UPC	3=SC/UPC
		62=62CH		...	4=SC/APC	4=SC/APC	4=SC/APC
		63=63CH			5=LC/UPC	5=LC/UPC	5=LC/UPC
		64=64CH			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