Transmissive L-Band Thermally Stabilized Filter (1510-1590nm 100GHz Fineness 7)

Product Description

Idealphotonics' thermally stable filters are based on advanced technology, and use unique optical and mechanical designs and advanced packaging technology to ensure the stability of the wavelength of this filter under extreme environmental conditions, including temperature and humidity. We have unique patented technology to ensure that the target accuracy of the wavelength of this filter is within ITU +/-1.25GHz in all environments. This ITU-aligned filter can be used for channel monitoring and wavelength

locking in wavelength division multiplexing (WDM) systems. We also have special technologies for customers to select the accuracy corresponding to a specific wavelength. This filter is divided into transmission and reflection according to different usage methods. The unique design can ensure that the standard tool fineness, channel spacing and operating wavelength have a wide range of choices. The thermally stable filter designed for customers can be well compatible with a variety of spectral applications, including telecommunications, wavelength reference and calibration and fiber optic sensing systems, test and measurement, and laser wavelength stabilization control.

Product features

Excellent thermal stability、 Low insertion loss、 Strong packaging、 Fiber outlet at one end for easy fiber winding

Part Number

MP-NTF-1510-16-7-SA

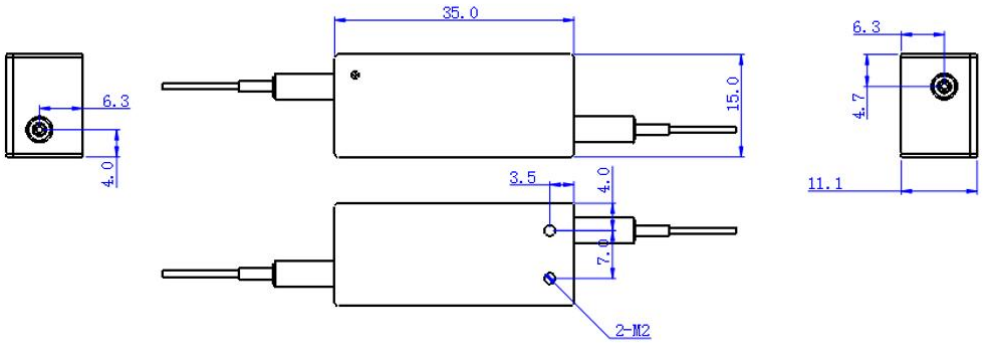
Application area

FBG sensor systems 、 Monitoring systems 、 Test and measurement equipment、 Instrumentations

Core parameters

Wavelength	Fineness	Channel Spacing
1510-1590nm	7	100GHz

Dimension Drawing



General Parameters

Parameter:

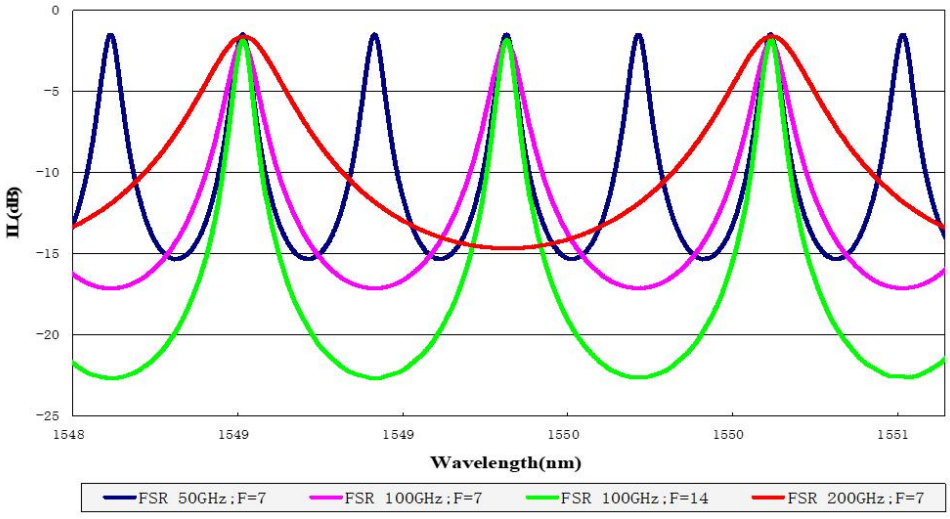
Item	Unit	Value
Operating wavelength	nm	1510~1590
Insertion loss	dB	Typ1.0,Max2.5
Polarization dependent loss	dB	0.1
Accuracy	GHz	+/-0.1
Channel spacing (FSR)	GHz	100
Thermal stability	GHz	⩽+/-0.8
Fineness		7
3dB bandwidth	GHz	⩽16
Contrast ratio	dB	⩾13

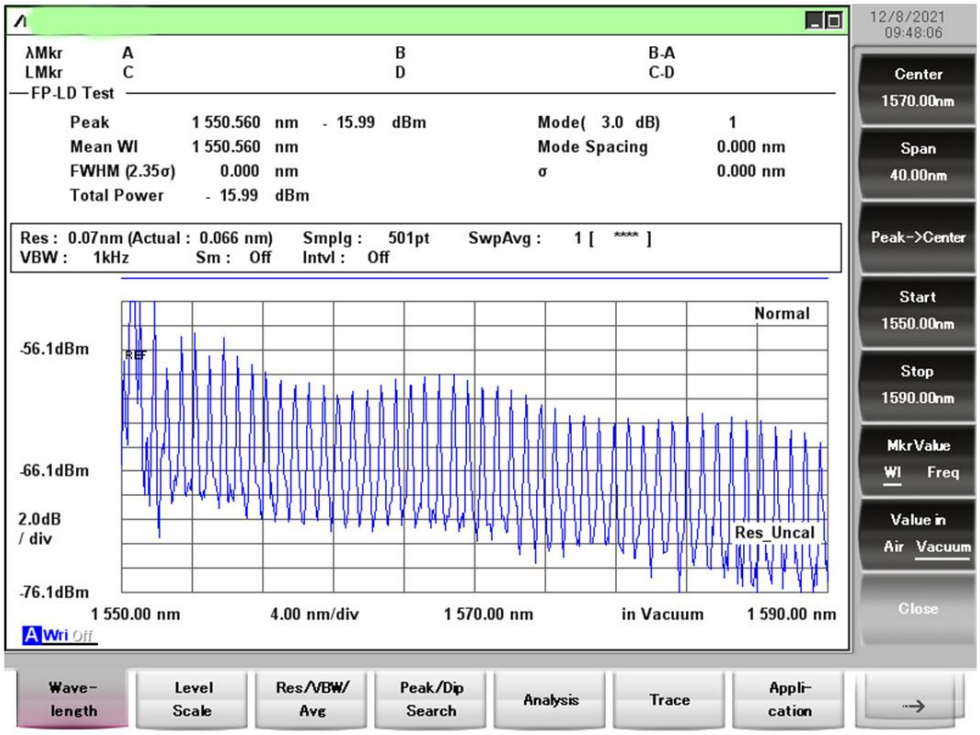
Item	Unit	Value
Channel filter peak	Nm	None (or select a certain ITU wavelength)
Return loss	dB	⩾20
Maximum power	mW	500
Operating temperature	℃	-5~70
Storage temperature	℃	-40~85
Fiber type	N/A	SMF-28e+
Dimensions	mm	35× 15×11(L×W×H)

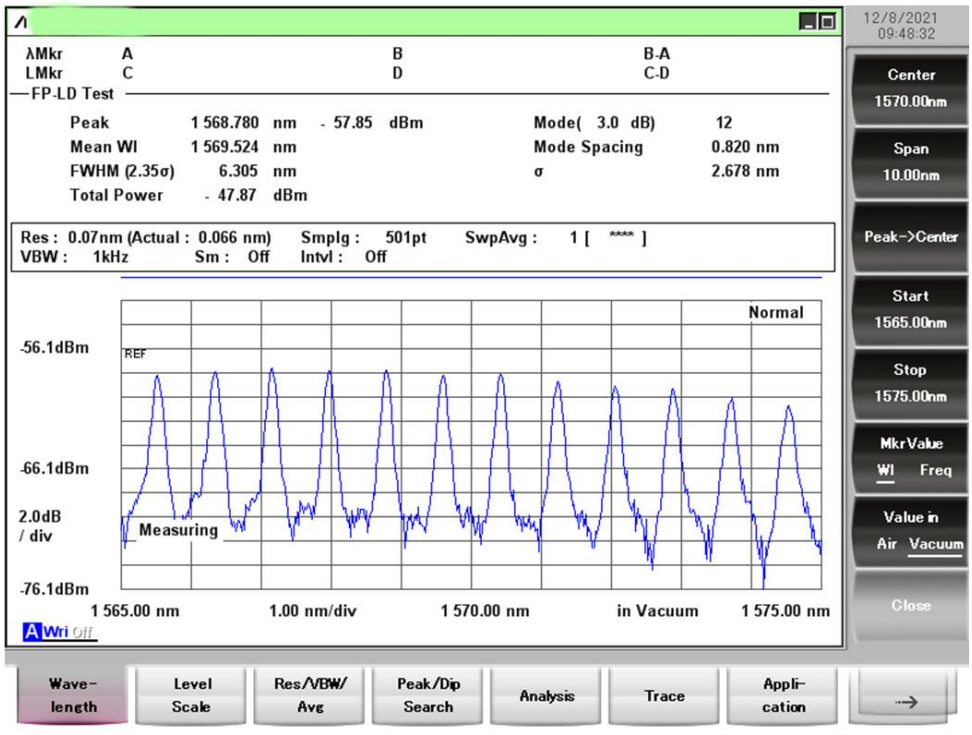
*.All specifications are without connectors and are only valid at the above wavelengths, polarization states and temperatures.

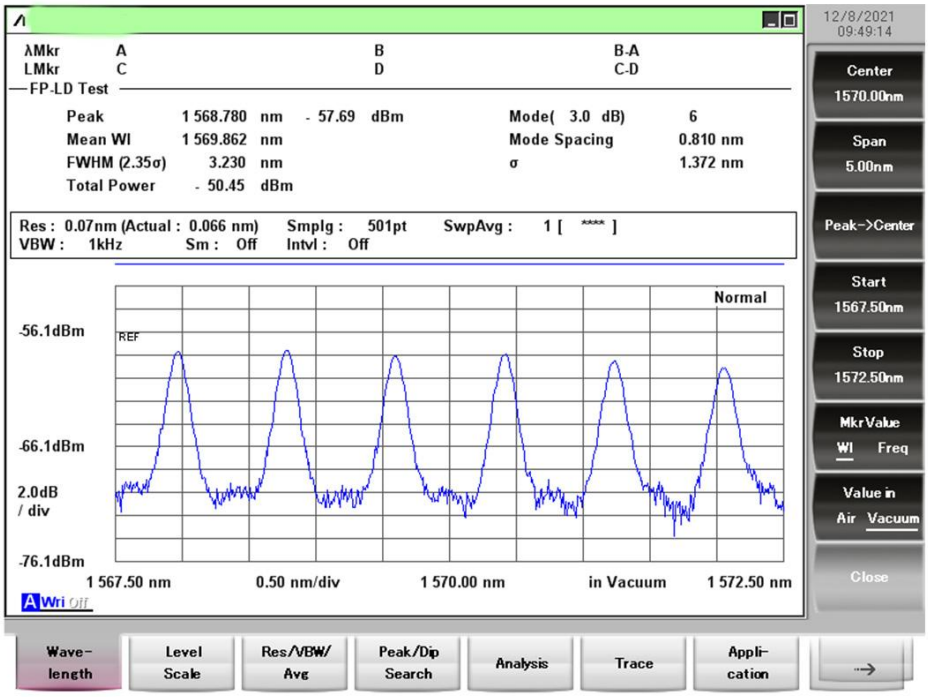
**.Specifications are subject to change without prior notice.

Spectrum:




12/8/2021
09:48:06
λMkr A B B-A
LMkr C D C-D
FP-LD Test
Peak 1 550.560 nm - 15.99 dBm
Mean WI 1 550.560 nm
FWHM (2.35σ) 0.000 nm
Total Power - 15.99 dBm
Mode(3.0 dB) 1
Mode Spacing 0.000 nm
σ 0.000 nm
Res : 0.07nm (Actual : 0.066 nm) SmpIg : 501pt SwpAvg : 1 [****]
VBW : 1kHz Sm : Off Intvl : Off
Normal
-56.1dBm
REF
-66.1dBm
2.0dB / div
-76.1dBm
Res_Uncal
1 550.00 nm
4.00 nm/div
1 570.00 nm
in Vacuum
1 590.00 nm
AWri Off
Center 1570.00nm
Span 40.00nm
Peak->Center
Start 1550.00nm
Stop 1590.00nm
MkrValue WI Freq
Value in Air Vacuum
Close
Wave-length
Level Scale
Res/VBW/ Avg
Peak/Dip Search
Analysis
Trace
Appli-cation


12/8/2021
09:48:32
λMkr A B B-A
LMkr C D C-D
FP-LD Test
Peak 1 568.780 nm - 57.85 dBm
Mean WI 1 569.524 nm
FWHM (2.35σ) 6.305 nm
Total Power - 47.87 dBm
Mode(3.0 dB) 12
Mode Spacing 0.820 nm
σ 2.678 nm
Res : 0.07nm (Actual : 0.066 nm) SmpIg : 501pt SwpAvg : 1 [****]
VBW : 1kHz Sm : Off Intvl : Off
Normal
-56.1dBm
REF
-66.1dBm
2.0dB / div
Measuring
-76.1dBm
1 565.00 nm
1.00 nm/div
1 570.00 nm
in Vacuum
1 575.00 nm
AWri Off
Center 1570.00nm
Span 10.00nm
Peak->Center
Start 1565.00nm
Stop 1575.00nm
MkrValue WI Freq
Value in Air Vacuum
Close
Wave-length
Level Scale
Res/VBW/ Avg
Peak/Dip Search
Analysis
Trace
Appli-cation



Order Info:

Fineness：7

Wavelength range：C band: 1525-1565nm，L band：1565 to 1625 nm

Working mode：A：transmission B：reflection

Channel spacing ： 100GHZ 50GHZ 200GHZ

Fiber Type：SA=SMF-28E+ FC/APC(Fiber Length:1m)

SP=SMF-28E+ FC/PC(Fiber Length:1m)

PA=PM Fiber+ FC/APC(Fiber Length:1m)

PP=PM Fiber+ FC/PC(Fiber Length:1m)

Package：14BF