

## Thermally Stable Transmission Filter (1525-1565nm 50GHz Fineness 14)



### ● 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-PL1-FN14-C-A-50-SA

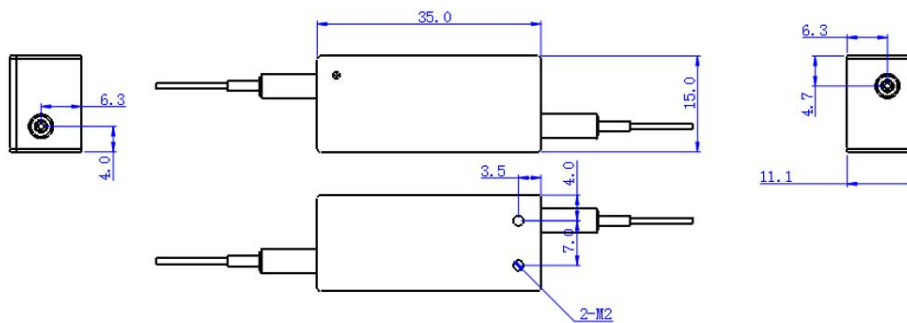
## ● Application area

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

## ● Core parameters

Wavelength	Fineness	Channel Spacing
1525-1565nm	14	50GHz

## ● 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
Channel filter peak	Nm	None (or select a certain ITU wavelength)

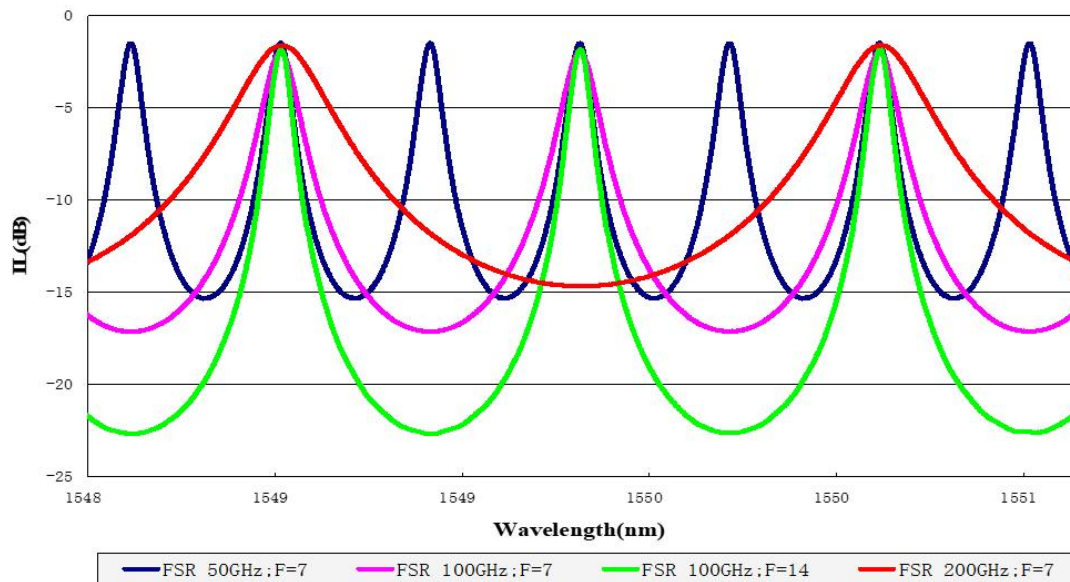


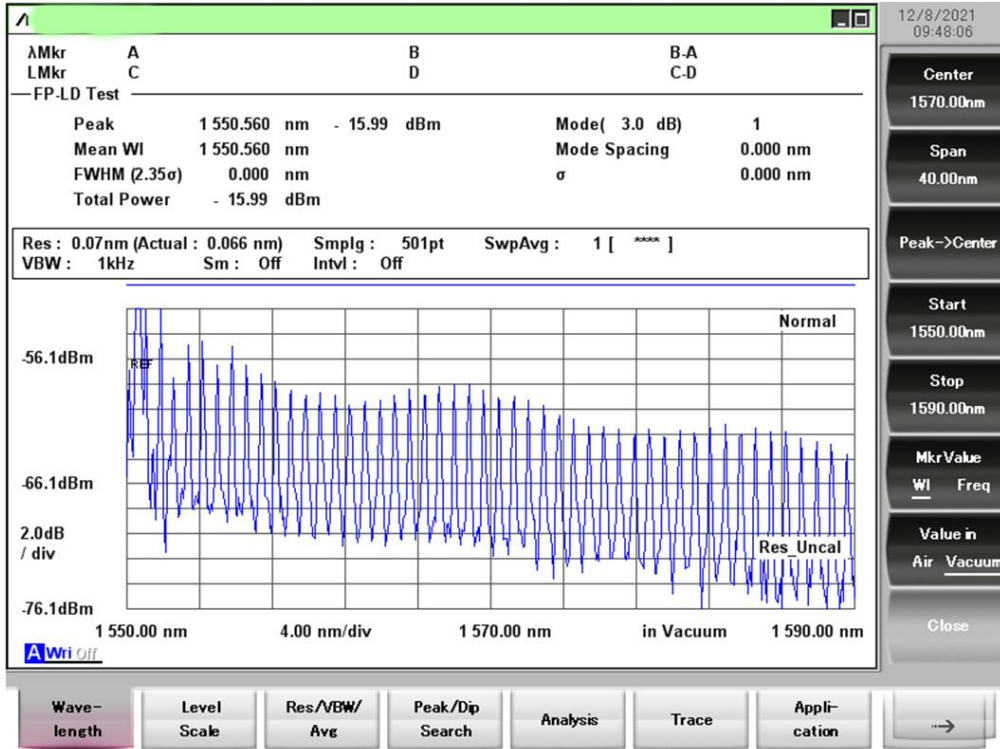
Item	Unit	Value
Return loss	dB	≥20
Maximum power	mW	500
Operating temperature	°C	-5~70
Storage temperature	°C	-40~85
Fiber type	N/A	SMF-28e+
Dimensions	mm	35 × 15 × 11(L × W × H)

Note: \*. All indicators are without connectors and are valid only at the above wavelength, polarization state and temperature.

\*\* . Indicators are subject to change without prior notice.

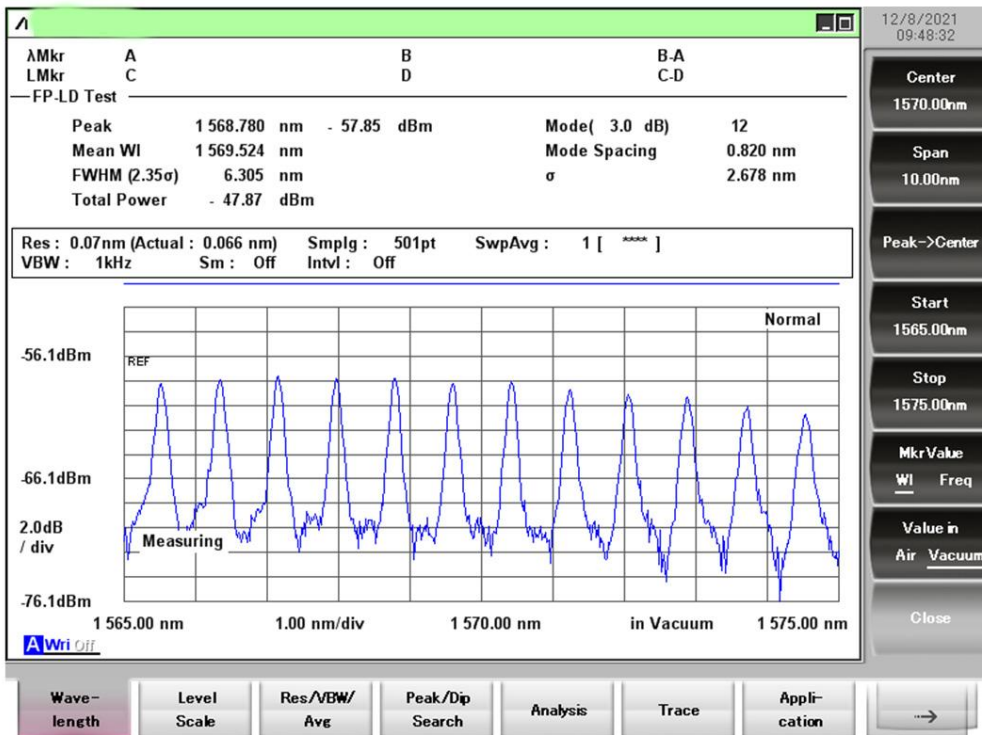
## Test spectrum





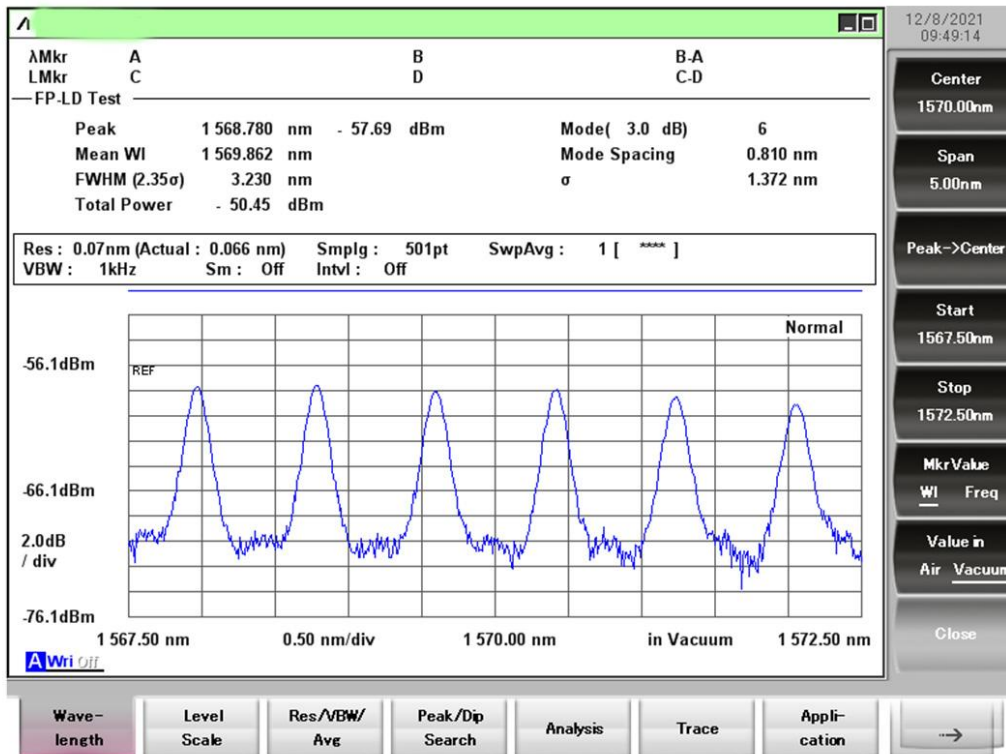
12/8/2021  
09:48:06

- Center  
1570.00nm
- Span  
40.00nm
- Peak->Center
- Start  
1550.00nm
- Stop  
1590.00nm
- MkrValue  
Wl Freq
- Value in  
Air Vacuum
- Close



12/8/2021  
09:48:32

- Center  
1570.00nm
- Span  
10.00nm
- Peak->Center
- Start  
1565.00nm
- Stop  
1575.00nm
- MkrValue  
Wl Freq
- Value in  
Air Vacuum
- Close



## Ordering Information

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