

Thermally Stable Transmission Filter

(1525-1565nm 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-1525-16-7-SA

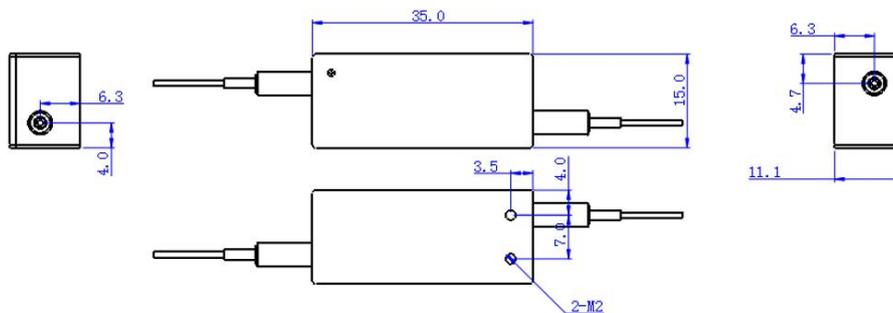
● Application area

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

● Core parameters

Wavelength	Fineness	Channel Spacing
1525-1565nm	7	100GHz

● Dimension Drawing



● General Parameters

Parameter:

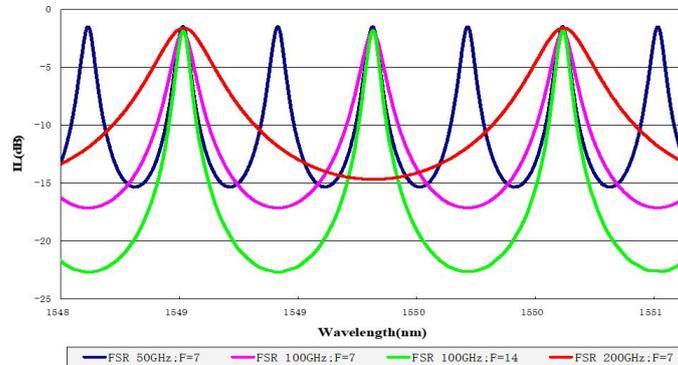
Item	Unit	Value
Operating wavelength	nm	1510~1590
Insertion loss	dB	Typ1.0,Max2.5
Polarization dependent loss	dB	0.1
Accuracy	GHz	+/-0.1
Channel spacing (FSR)	GHz	100
Thermal stability	GHz	≤+/-0.8
Fineness		7
3dB bandwidth	GHz	≤16
Contrast ratio	dB	≥13
Channel filter peak	Nm	None (or select a certain ITU wavelength)
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



AMkr	A	B	B-A
L Mkr	C	D	C-D

FP-LD Test

Peak	1550.560 nm	-15.99 dBm	Mode(3.0 dB)	1
Mean WI	1550.560 nm		Mode Spacing	0.000 nm
FWHM (2.35σ)	0.000 nm		σ	0.000 nm
Total Power	-15.99 dBm			

Res: 0.07nm (Actual: 0.066 nm) Smplg: 501pt SwpAvg: 1 [****]
 VBW: 1kHz Sm: Off Intvl: Off

Wave-length Level Scale Res/VBW/ Ave Peak/Dip Search Analysis Trace Appli- cation

12/8/2021
09:48:06

Center
1570.00nm

Span
40.00nm

Peak->Center

Start
1550.00nm

Stop
1590.00nm

Mkr Value
WI Freq

Value in
Air Vacuum

Close

AMkr	A	B	B-A
L Mkr	C	D	C-D

FP-LD Test

Peak	1568.780 nm	-57.85 dBm	Mode(3.0 dB)	12
Mean WI	1569.524 nm		Mode Spacing	0.820 nm
FWHM (2.35σ)	6.305 nm		σ	2.678 nm
Total Power	-47.87 dBm			

Res: 0.07nm (Actual: 0.066 nm) Smplg: 501pt SwpAvg: 1 [****]
 VBW: 1kHz Sm: Off Intvl: Off

Wave-length Level Scale Res/VBW/ Ave Peak/Dip Search Analysis Trace Appli- cation

12/8/2021
09:48:32

Center
1570.00nm

Span
10.00nm

Peak->Center

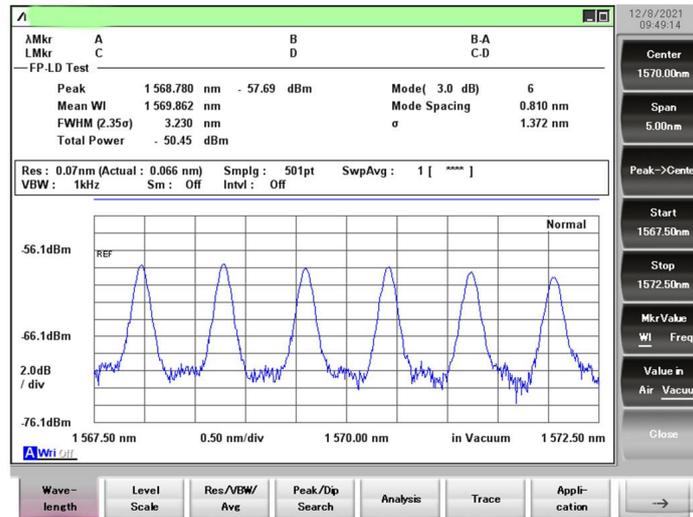
Start
1565.00nm

Stop
1575.00nm

Mkr Value
WI 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