Mark-Type Thermally Stable Standard

1525-1565nm

● Product Description

The Mark-ID Thermally Stable Photonic Filter from idealphotonics is based on advanced ETALON technology , incorporating unique optical and mechanical designs , along with advanced packaging technology. This ensures the stability of the filter's wavelength under extreme environmental conditions , including temperature and humidity . With our unique patented technology , the filter guarantees the wavelength's target accuracy within ITU +/- 1.25 GHz , and is available in selectable options . This

ITU-aligned filter can be used for channel monitoring and wavelength locking in Wavelength Division Multiplexing (WDM) systems . We also offer special technology options for customers to choose specific wavelength accuracy . This thermally stable filter module can lock one or more consecutive adjacent wavelength peaks , forming a fixed wavelength marker . This wavelength marker helps client scanning systems determine their specific position within a wavelength range . The unique design of this filter ensures the precision of the standard , channel spacing , and operational wavelength , with a wide selection range . The thermally stable filter, designed for customer use , is highly compatible with various spectral applications , including telecom , wavelength reference and calibration , fiber optic sensing systems , testing and measurement , and laser wavelength stability control .

● Product features

Based on advanced Etalon technology 、 Wavelength stability 、 Compact packaging
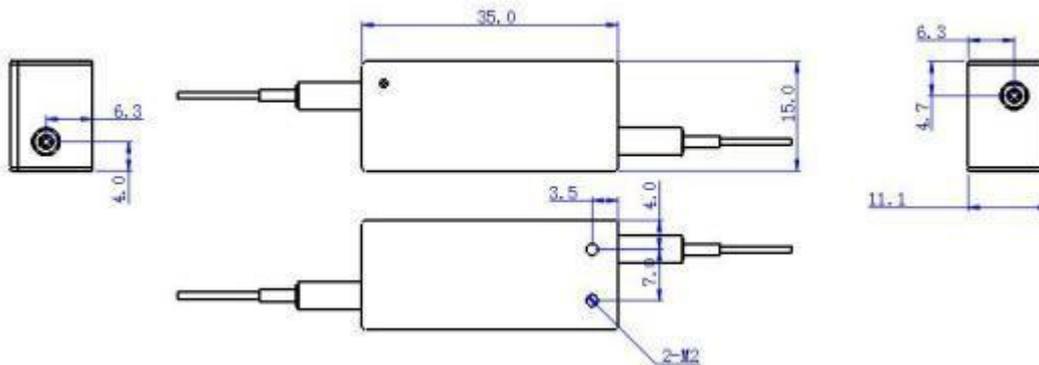
● Part Number

MP-FPE-C-2-100-7

● Application area

FBG sensing systems 、 System monitoring 、 Testing and measurement 、

Instrumentation

● Core parameters

Wavelength Range	Channel Spacing	Thermal Stability
1525-1565nm	100GHz	≤±0.8GHz

● Dimension Drawing

● General Parameters

Technical Specifications

Parameter	Unit	Value	Notes
Wavelength Range	nm	1525 ~ 1565	Customizable
Insertion Loss	dB	Typ1.0, Max2.5	

| Parameter	Unit	Value		Notes
Polarization Dependent Loss	dB	0.1		
Polarization Accuracy	GHz	+/- 0.1		
Channel Spacing	GHz	100		
Thermal Stability	GHz	≤ +/- 0.8 (Standard)		Over the entire temperature range
Precision		7	14	
Transmission Bandwidth @ 3dB	GHz	≤ 16	≤ 9	
Contrast	dB	≥ 13	≥ 18	
Marking Channel (Mark Point)		C34(1550. 116)		Other wavelengths available
Return Loss	dB	≥ 20		Customizable based on requirements
Max Optical Power	mW	500		
Operating Temperature	0C	-5 ~ 70		Wider temperature range avaliable
Storage Temperature	0C	-40 ~ 85		
Dimensions (L × W × H)	mm	35× 15× 11		
Fiber Type	N/A	SMF-28e + with 900μm fiber		

*Notes:The above parameters exclude the connector specifications

and are only valid at the specified wavelengths, polarization states, and

temperature ranges.

Specifications are subject to change without prior notice.

Spectral Diagram
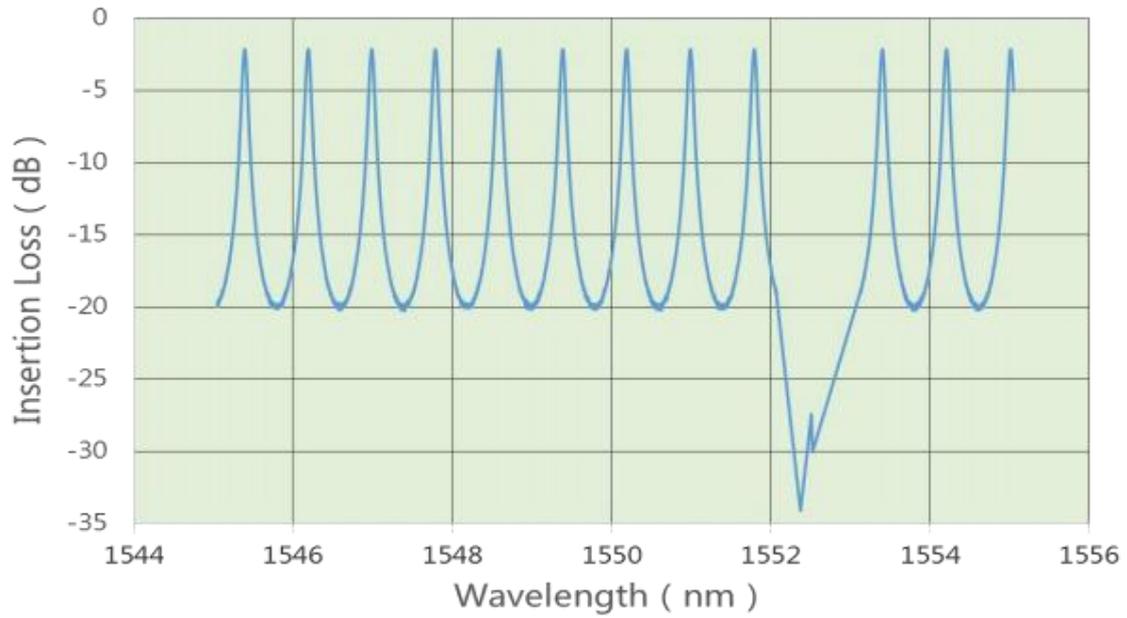
Ordering Information

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Marked Peak Wavelength	Operating Wavelength	Precision	Channel Spacing	Fiber Length (M)	Connector Type
1. C34	1. C Band	1. 7	1. 100 GHz	1. 0. 5 +/- 0.1	0.No Connector
2. Others	2. L Band	2. 14	2. 50 GHz	2. 1.0 +/- 0.1	1. FC/UPC
	3. Others	3. Others	3. Others	3. Others	2. FC/APC
					3. SC/UPC
					4. SC/APC
					5. LC/PC
					6. MU/PC
					7. Others