

Features

- Extreme wavelength thermal stability
- Low IL and PDL
- Robust hermetic packaging
- Easy routing -all fibers on same side



Applications

- FBG sensing system
- System monitoring
- Test & measurement
- Instrumentation



Product Description

Primanex Athermal Reference Filters are based on advanced etalon technology. With Primanex unique opto-mechanical design and advanced packaging techniques, the filters demonstrate extreme wavelength stability under varied environmental conditions including temperature and humidity.

Built by a proprietary precision tuning technique, the filters come with an option of ITU targeting accuracy within +/- 1.25GHz. This ITU-targeted filter can be used in WDM system channel monitoring and wavelength locking. A special option is also available for customer to select specific wavelengths for precision targeting.

The filters come in a transmission form, and come with a broad design options including etalon finesse, channel spacing (FSR) and operating wavelength range. The customer friendly product design enables the Athermal Reference Filters to be utilized in a spectrum of diverse applications including telecommunication, wavelength referencing and calibrating in fiber-optics sensing system, test & measurement instrumentation, and laser wavelength stabilization.

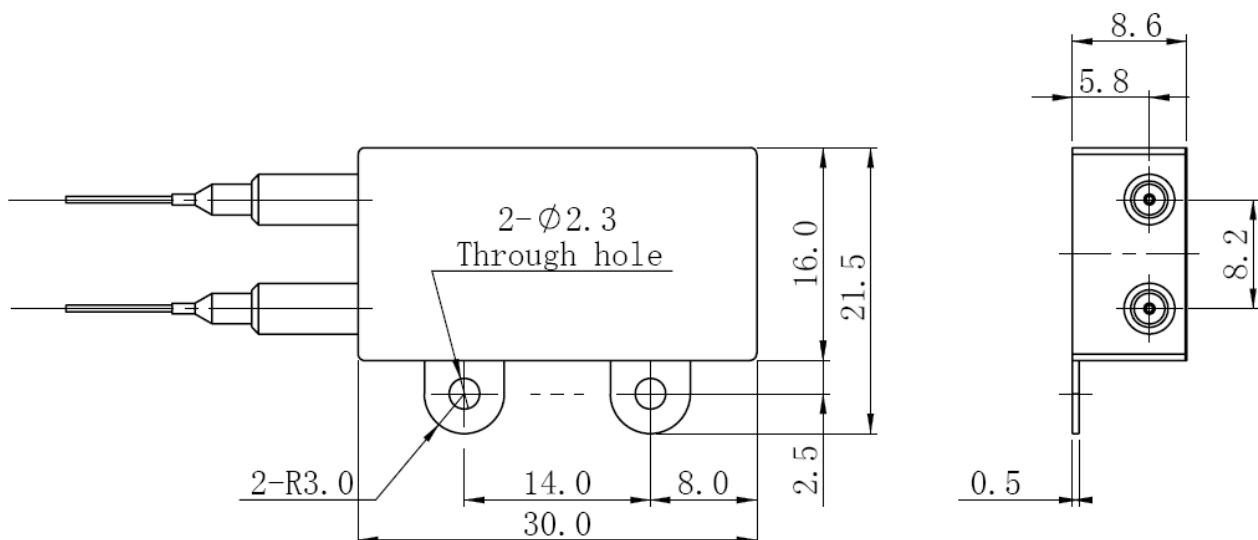
Specifications

Item	Unit	Parameters		Notes
Wavelength Range	nm	1525 ~ 1575		Customizable
Insertion Loss	dB	3.0		
Polarization Dependent Loss	dB	0.1		
Polarization Dependent Accuracy	GHz	+/- 0.1		
Channel Spacing (FSR)	GHz	100		25G, 50G and 200G available upon request
Thermal Stability	GHz	≤ +/- 0.8		
Finesse		7	14	Other finesses available upon request
Bandwidth@3dB	GHz	≤ 16	≤ 9	
Contrast	dB	≥ 13	≥ 18	
Back Reflection	dB	≥ 20		
Maximum Optical Power	mW	500		
Operating Temperature	°C	-5 ~ 70		Wider temperature range available upon request
Storage Temperature	°C	-40 ~ 85		
Fiber Type	N/A	Corning SMF-28e+		Other fibers available
Dimension (L×W×H)	mm	30 × 21.5 × 8.6		

*. All the specifications are based on the devices without connectors, and guaranteed over the operating temperature ranges, wavelength ranges and all polarization states.

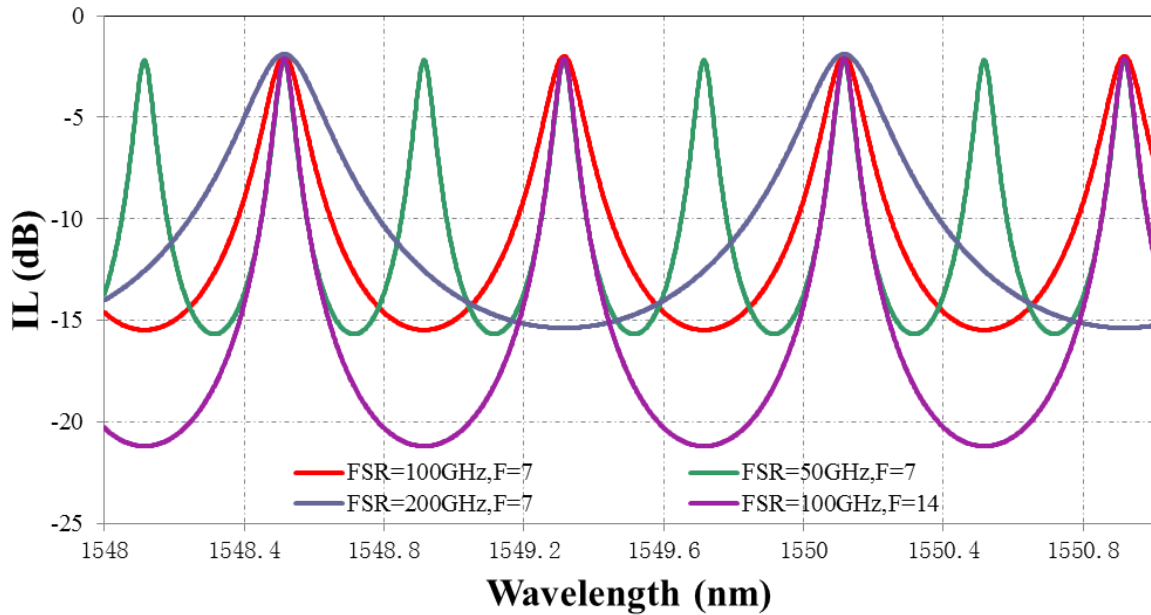
** Specifications are subject to change without notice.

Dimensions Drawing (Unit: mm)





Spectral Plots



Ordering Information (Example: PETL1-211T11200)

PETL1	—	<input type="checkbox"/>	1	<input type="checkbox"/>	T	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finesse					Operating Mode		Fiber Type				Connector Type (In/Out)
1. 7					T. Transmission		1. SMF-28e+ 250μm fiber				0. No Connector
2. 14					R. Reflection*		2. SMF-28e+ 900μm fiber				1. FC/UPC
3. Others							3. Others				2. FC/APC
Operating Wavelength					Channel Spacing						3. SC/UPC
1. C band					1. 100 GHz						4. SC/APC
2. L Band					2. 50 GHz						5. LC/PC
3. Others					3. 200 GHz						6. MU/PC
					4. 25 GHz						7. Others
					5. 21 GHz						
					6. Others						
							Fiber Length				
							1. 0.5 +/- 0.1 m				
							2. 1.0 +/- 0.1 m				
							3. Others				

*. Device at Reflection mode is available upon request, and shares same dimension and appearance as those of transmission-type device.

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