

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.

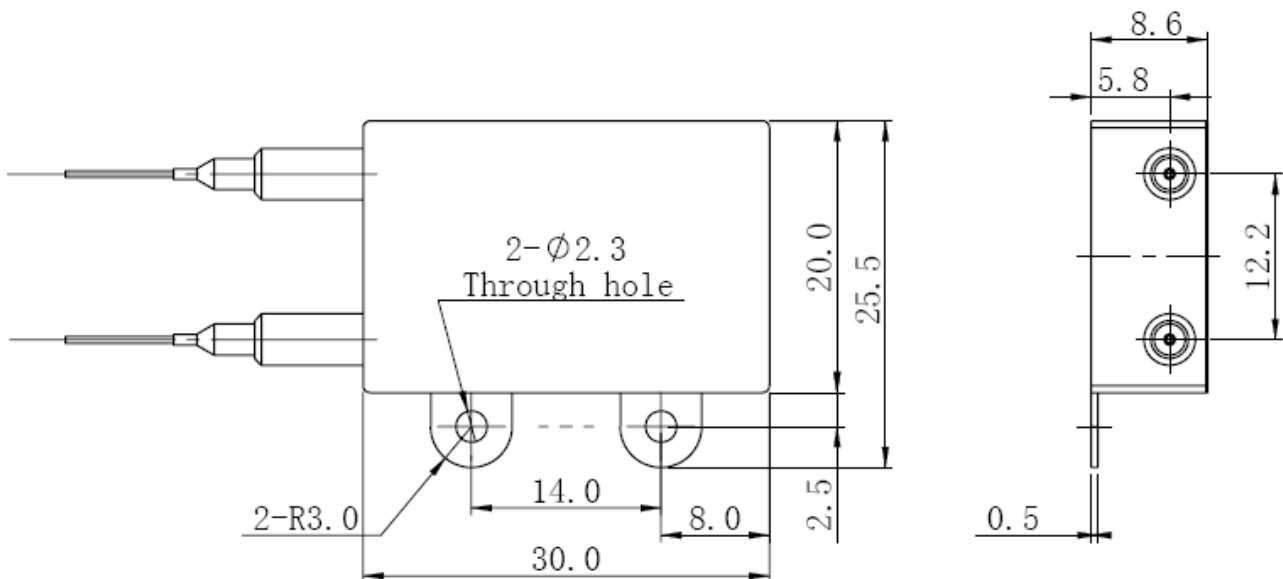
Specifications

Item	Unit	Parameters		Notes
Wavelength Range	nm	1525 ~ 1565		Customizable
Insertion Loss	dB	≤3		
Polarization Dependent Loss	dB	0.1		
Polarization Dependent Accuracy	GHz	+/- 0.1		
Channel Spacing (FSR)	GHz	25		50G,100G and 200G available upon request
Thermal Stability	GHz	≤ +/- 0.8		
Finesse		7	14	Other finesses available upon request
Bandwidth@3dB	GHz	≤ 5	≤ 3	
Contrast	dB	≥ 13	≥ 16	
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 fiber available
Dimension (L×W×H)	mm	30 × 25.5 × 8.6		

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

** Specifications are subject to change without notice.

Dimensions Drawing (mm)

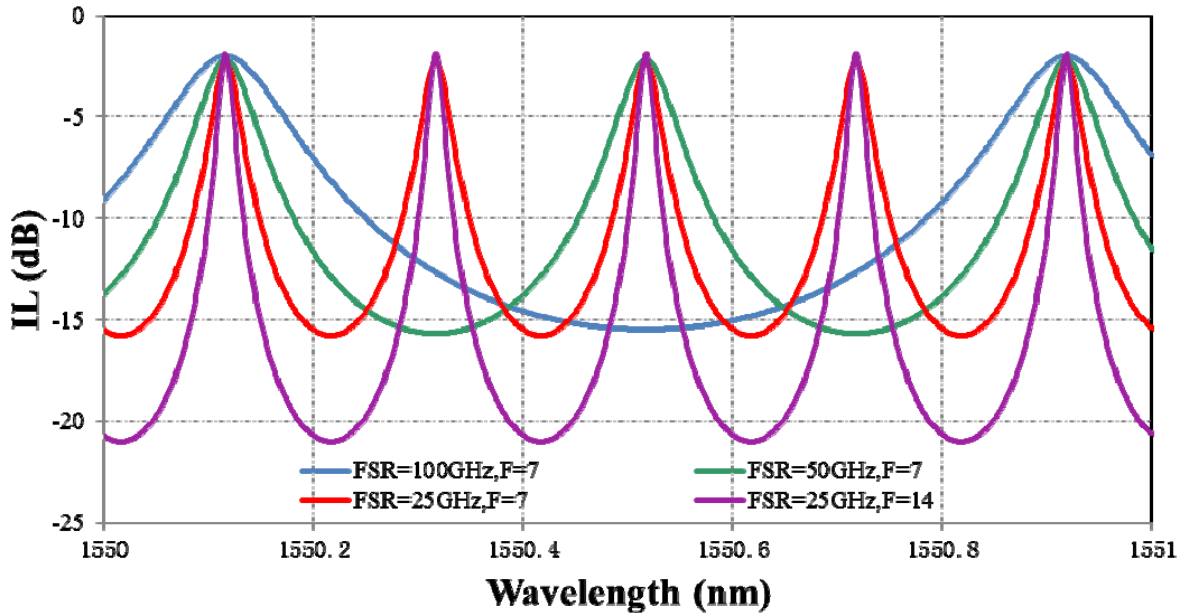




25G Athermal Wavelength Reference Filter

Photonics Beyond Boundary

Spectral Plot



Ordering Information (Example: PETL1-111T41100)

PETL1 — **1** **T**

<p>Finesse</p> <hr/> <p>1. 7</p> <hr/> <p>2. 14</p> <hr/> <p>3. Others</p> <hr/> <p>Operating Wavelength</p> <hr/> <p>1. C band</p> <hr/> <p>2. L Band</p> <hr/> <p>3. Others</p> <hr/>	<p>Operating Mode</p> <hr/> <p>T. Transmission</p> <hr/> <p>R. Reflection*</p> <hr/> <p>Channel Spacing</p> <hr/> <p>1. 100 GHz</p> <hr/> <p>2. 50 GHz</p> <hr/> <p>3. 200 GHz</p> <hr/> <p>4. 25GHz</p> <hr/> <p>5. 21GHz</p> <hr/> <p>6. Others</p> <hr/>	<p>Fiber Type</p> <hr/> <p>1. 250μm fiber</p> <hr/> <p>2. 900μm fiber</p> <hr/> <p>3. Others</p> <hr/> <p>Fiber Length</p> <hr/> <p>1. 0.5 +/- 0.1 m</p> <hr/> <p>2. 1.0 +/- 0.1 m</p> <hr/> <p>3. 1.5 +/- 0.1 m</p> <hr/> <p>4. Others</p> <hr/>	<p>Connector Type (In/Out)</p> <hr/> <p>0. No Connector</p> <hr/> <p>1. FC/UPC</p> <hr/> <p>2. FC/APC</p> <hr/> <p>3. SC/UPC</p> <hr/> <p>4. SC/APC</p> <hr/> <p>5. LC/PC</p> <hr/> <p>6. MU/PC</p> <hr/> <p>7. Others</p> <hr/>
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*. Device at Reflection mode is available upon request, and shares same dimension and appearance as those of transmission-type device.

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