

#### 50G Athermal Wavelength Reference Filter

Photonics Beyond Boundary

#### **Features**

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

## RoHS Compliant

# Applications ERG sensing

- 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.





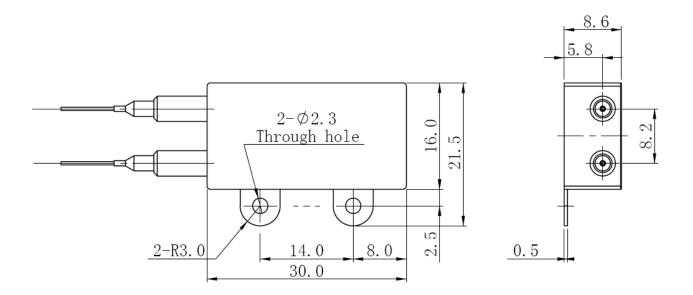
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#### **Specifications**

Item	Unit	Parameters		Notes
Wavelength Range	nm	1525 ~ 1565		Customizable
Insertion Loss	dB	3.0		
Polarization Dependent Loss	dB	0.1		
Polarization Dependent Accuracy	GHz	+/- 0.1		
Channel Spacing (FSR)	GHz	50		25G,100G and 200G etc. available upon request
Thermal Stability	GHz	≤ +/- 0.8		
Finesse		7	14	Other finesses available upon request
Bandwidth@3dB	GHz	≤ 10	≤6	
Contrast	dB	≥ 12	≥ 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 ×21.5 ×8.6		

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

#### **Dimensions Drawing (Unit: mm)**

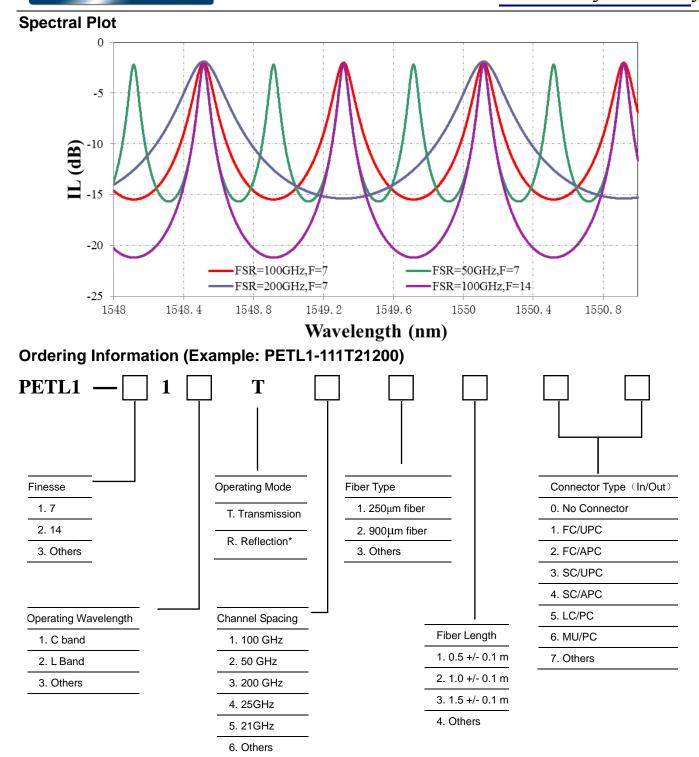


<sup>\* \*.</sup> Specifications are subject to change without notice.



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

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