

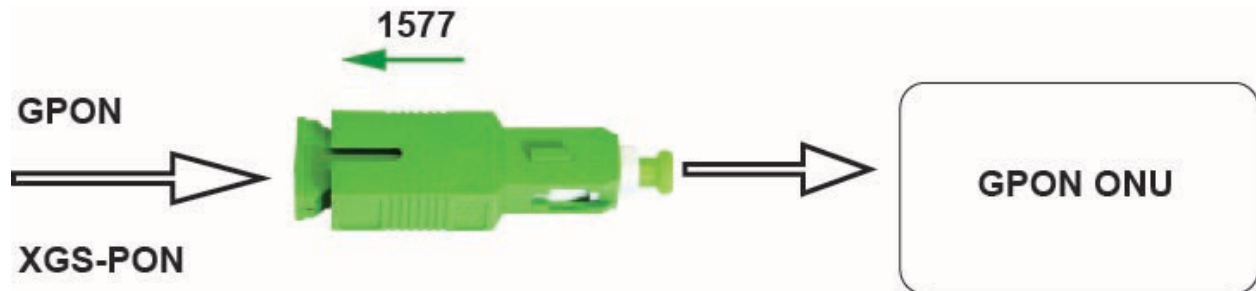
Description:

1577nm fiber grating filter is an important device for communication link detection in the field of optical communication. The principle is equivalent to a band pass filter, which completely reflects back the light from 1572nm to 1582nm (the return ratio is more than 99.5%), and all other wavelengths of light pass through. When used in the field of communication, it can separate the communication light from the detection light, prevent the detection light from passing through and thus affect the communication signal. At the same time, it can detect the return light at the control end. Its advantages are accurate control, stable operation and long service life.



Features:

- The grating is embedded in the optical fiber and is not affected by environmental pollution
- High reliability and long service life
- High reflectivity (higher than 99.5%) for the band to be blocked, close to total reflection
- Accurate wavelength control of reflection band (1645nm~1655nm)
- The transition zone at the bandpass edge is very narrow (less than 2nm), and it is all-pass when passing through this zone



Performance Specifications:

No	Parameter				
1	Pass Bandwidth	nm	1260-1560		
2	Reflect Band Wavelength	nm	1572-1582		
3.1	IL 1260nm-1360nm	dB			1.4
3.2	IL 1460nm-1560nm	dB			1.4
3.3	IL 1560nm-1570nm	dB			2.0

3.4	IL Reflect Band	dB	21		
4.1	ORL 1260nm-1360nm	dB	35		
4.2	ORL 1460nm-1560nm	dB	35		
4.3	ORL 1560nm-1570nm	dB	20		
4.4	Reflect Band Note 3	dB	0		1.0
5	TDL 1260nm-1600nm	dB			0.4
6	Reflect Band	dB			0.6
7	Max Optical Power Handling	dBm	27		
8	Plug Times		500		
9	Input/Output	SC/APC Male & SC/APC Female			

No	Parameter	Specification	Units	Note
3.1	Operation Temperature	-25~ +65	°C	---
3.2	Operation Humidity	5~95	%RH	---
3.3	Storage Temperature	-40 ~ +85	°C	---
3.4	Storage Humidity	5~95	%RH	---

Absolute Maximum Ratings

Parameters	Conditions	Specifications		Unit
		Min.	Max.	
Operating Temperature		-20	75	°C
Operating Humidity	Non-Condensing Environment	0	95	%RH
Storage Temperature		-40	85	°C
Storage Humidity	Non-Condensing Environment	0	95	%RH

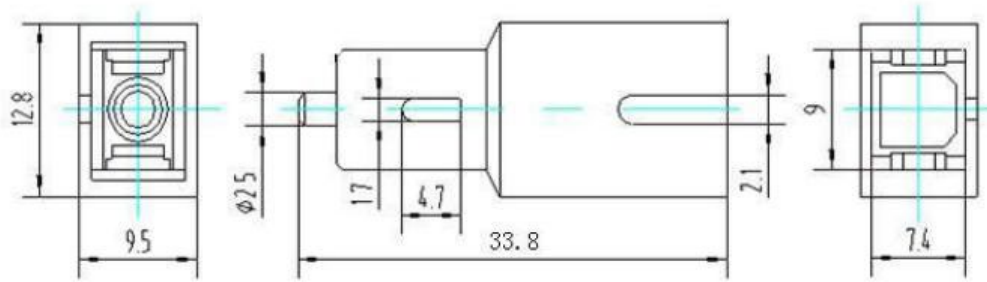
Notes:

(*) ORL (dB) = -10 log 10 (Reflected Power/Input Power) [dB]

(**) IL (dB) = -10 log 10 (Output Power/Input Power) [dB]

(***) To measure the Return Loss of reflect band, 1577nm light source should be injected into the female side of reflector.

Mechanical Dimensions



Part Number	Description
FWRB1577	1577nm OTDR WDM Reflector