PRODUCT INTRODUCTION

FBG Filter

Based on fibre Bragg grating technology, it is used to reflect the OTDR detection signal from the optical line terminal side (OLT), while the working wavelength in the normal passive optical network system (PON) can pass through the reflector. When the measurement system sends out signal light in a certain wavelength range to the fibre grating line terminal at the end of the optical path, the grating reflector reflects the specific wavelength (1644.5nm~1655.5nm) of the grating back. If the detection system detects this signal normally, it proves that this fibre link is normal.

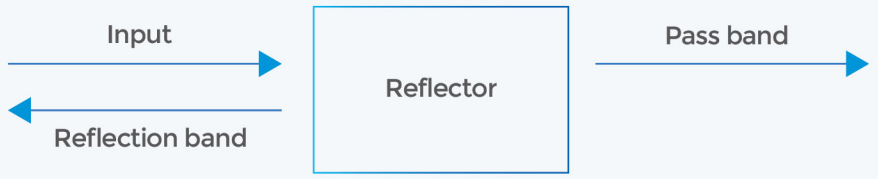
Features

- High accuracy of reflection wavelength and reflectivity control
- Low insertion loss in the communication band
- Various adapter configurations are available, such as: LC/APC, SC/APC
- Specific models can be installed in both directions
- High reliability and long service life
- Match GPON, EPON, GEPON, 10GEPON, NGPON

Applications

- Used for monitoring and maintenance of optical path in optical detection system, and can be applied to FTTH, FTTB, FTTC

Product characteristics / Enhanced graph



Schematic diagram

Parameters

Specifications

Type	REF-1650-XX-XX*①	
Parameters	Minimum	Maximum
Optical specifications		
Pass band wavelength range(nm)	1260	1625
Reflect band wavelength range(nm)	1644.5	1655.5
Insertion loss (1260nm - 1360nm) (dB)*②	-	1.0
Insertion loss (1460nm - 1600nm)(dB)	-	1.0
Insertion loss (1600nm - 1625nm) (dB)	-	2.0
Insertion loss (REFLECT BAND)(dB)	21	-
Return loss (1260nm - 1360nm) (dB)*③	35	-
Return loss (1460nm - 1580nm) (dB)	35	-
Return loss (1580nm - 1620nm) (dB)	30	-
Return loss (1620nm - 1625nm) (dB)	20	-
Return loss (1644.5nm-1655.5nm) (dB)	0	1
Flatness (1644.5nm-1655.5nm) (dB)	0	0.6
Polarization dependent loss (1260nm - 1600nm) (dB)	0	0.4
Temperature dependent loss (1260nm - 1600nm) (dB)	0	0.5
Maximum optical power handling(dBm)	27	
Plug times	500	-
Connector	SC/APC Male & SC/APC Female	-
Environmental indicators		
Storage temperature (°C)	-40	85
Operating temperature (°C)	-25	65
Storage relative humidity(RH%)	5	95

*① REF-1650-XX-XX, where the first XX refers to the optical fibre type and the second XX refers to the structure type
*② Insertion Loss (dB) = - 10lg (Output Power/ Input Power) (dB)
*③ Return Loss (dB) = -10lg (Reflected Power/ Input Power) (dB); To measure the Return Loss of reflect band, the light of 1650nm should be injected from the female side of reflector.