

FBG Reflectors

Components and Installation Tools

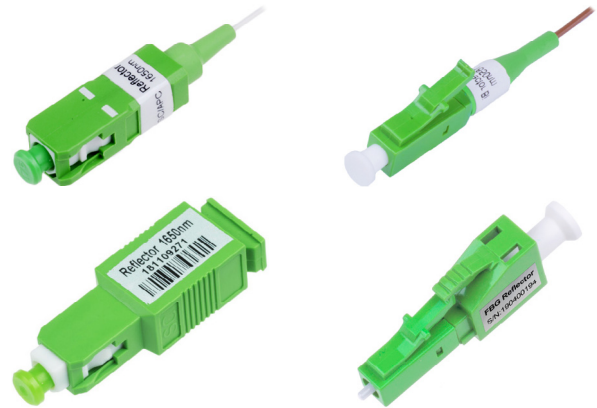
Fiber Bragg Grating (FBG) Reflectors are installed at an ONU to reflect 1625-1650nm signals from an OTDR for line testing purposes from the OLT, while the working bands of the PON are transmitted normally.

When the reflected signal has low loss, the circuit is functioning properly, when the loss is significant, the circuit has an issue, and when no signal is returned, the optical circuit is broken.

They are available with SC or LC connector types in a female to male adapter configuration, a 1 meter pigtail configuration, or a 0.5 meter fiber only configuration. The reflect band is monodirectional.

The adapter configuration works similar to an attenuator and can be added to any existing connector.

The pigtail configuration has the FBG inside the ferrule and can be made into an assembly or spliced.



Features

- Compliant with Telcordia GR-326-CORE, GR-1221-CORE, and RoHS
- High stability and reliability
- Low insertion loss



Specifications

Parameter	Adapter	Pigtail or Fiber Only
Pass Band Wavelength Range (nm)	1260-1360 & 1460-1581	1260-1600
Reflect Band Wavelength Range (nm)	1610-1660	1625-1650
Pass Band IL (dB)	≤1.2	≤1.4 (1260-1360nm), ≤1.4 (1460-1580nm), ≤2.0 (1580-1600nm), >21 (1620-1630nm)
Reflect Band IL (dB)	≥17	≥21 (1620-1630nm)
Pass Band RL (dB)	≥18 (1260-1360nm), ≥17 (1460-1581nm)	>35 (1260-1360nm), >35 (1460-1580nm), >25 (1580-1600nm)
Reflect Band RL (dB)	≤1.0	
PDL (dB)	≤0.3	≤0.4
TDL (dB)	≤0.5	≤0.5
Ripple (dB)	≤0.5	≤0.6
Optical Power Handling (dBm)	≤27	≤27
Fiber Type		Singlemode G.657.A1
Working / Storage Temperature (°C)	-25~+75 / -40~+85	-20~+70 / -40~+85

Part Number

FBG- -

1 2

1 FBG Type
AD = Adapter
PT = Pigtail
FB = Fiber Only

2 Connector Type
Leave Blank for
Fiber Only
SC = SC
LC = LC

2 Polish Type
Leave Blank
for Fiber Only
U = UPC
A = APC