Pigtail Typed FBG Reflector

The Pigtail Typed FBG Reflector is a standard SC type connector structure, which package with a 1650nm FBG reflector in the ceramic ferrule of SC connector.

The 1650nm Pigtail Typed FBG reflector is located at all the Optical Network Unit (ONU) side of a Passive Optical Network (PON), which will reflect the test signal from the OTDR at the Optical Line Terminal (OLT) side, while the traffic signal of PON system will pass through the reflector with very little loss. The reflector is used to help to increase the sensitivity of the OTDR for checking the optical continuity of a subscriber and troubleshooting.

Key Features

- High stability and reliability
- Remote real-time detection
- Low insertion loss
- Easy connection for adapter structure
- Compliant with Telcordia GR-326-CORE, Telcordia GR-1221-CORE and RoHS

Applications

- PON network
- OTDR testing
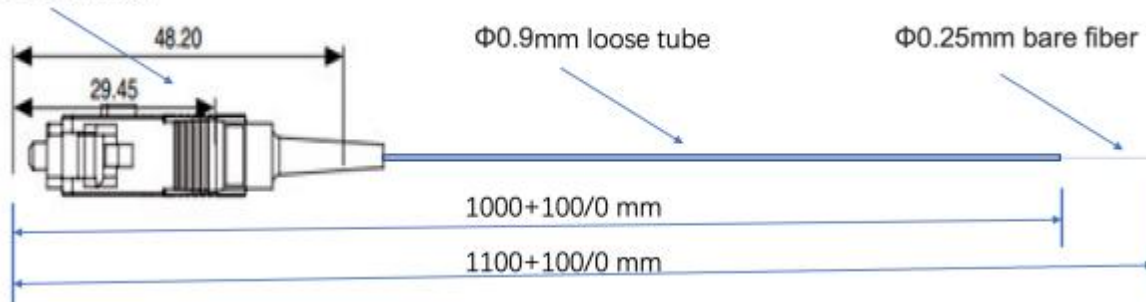- Central Office Terminal
- FTTX

Specifications

Item	Parameter		Value	Unit	Remarks
1	Wavelength Range	Pass band	1260~1625	nm	-
		Reflect band	1645~1655	nm	-
2	Pass band	IL	≤1.4	dB	@1260~1360
			≤1.4	dB	@1460~1600
			≤3.4	dB	@1600~1625
		ORL	>35	dB	@1260~1580
			>30	dB	@1580~1620
			>25	dB	@1620~1625
3	Reflect band	IL	>21	dB	@1645~1655
		ORL	≤1.0	dB	@1645~1655

4	PDL	≤0.4	dB	@1260~1600
5	Ripple	≤0.6	dB	@1645~1655
6	PMD	≤0.2	ps	@1260~1600
7	Max Optical Power Handling	27	dBm	-
8	Plug Times	>500	Times	-
9	Connector	SC/APC	-	-
10	Fiber type	G657 A1/A2	-	-
11	Loose tube diameter	0.9	mm	Customized
12	Loose tube material	PVC or Hytrel	-	Customized

Structure

The FBG reflector adopts a standard SC connector structure, and its external dimensions are as follows :

Working/storage conditions

Parameter	Specification	Unit
Working temperature	-25 ~ +65	°C
Working humidity	5~95	%RH
Storage temperature	-40 ~ +85	°C
Storage humidity	5~95	%RH

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