

Blockless PLC Fiber Splitter, Mini Module, Singlemode

PON & Datacom & LAN & LCP & CATV & FTTx Application



Overview

Planar lightwave circuit(PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology to distribute optical signals from Central Office(CO)to multiple premise locations. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity. These are widely used in PON networks to realize optical signal power splitting as a low-cost solution.

Features

- Low Insertion Loss
- Low PDL (Polarization Dependent Loss)
- Compact Design
- Fully Passive Optical Branching Device
- Wide Operating Wavelength: 1260nm to 1650nm
- Wide Operating Temperature: -40°C to 85°C
- Conformed to ISO14001, ISO9001, RoHS

Application

- FTTX Systems
- LAN, WAN and Metro Networks
- Analog/Digital Passive Optical Networks
- CATV Networks
- Other Applications in Fiber Optic Systems

Technical Specification

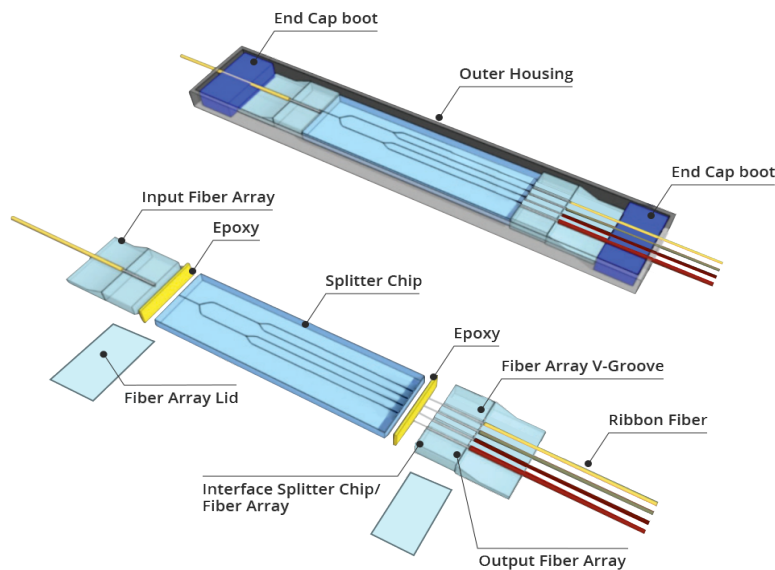
Parameters	1x 2	1x 3	1x 4	1x 6	1x 8	1x 9
Operating Wavelength (nm)	1260 ~ 1650					
Fiber Type	G.657A1					
Insertion Loss (dB)	≤4.1	≤6.0	≤7.4	≤9.0	≤10.5	≤16.5
Loss Uniformity (dB)	≤0.4	≤0.45	≤0.6	≤0.55	≤0.8	≤0.5
Polarization Dependent Loss (dB)	≤0.2	≤0.2	≤0.2	≤0.1	≤0.2	≤0.2
Return Loss (dB)	≥55	≥50	≥55	≥50	≥55	≥50
Directivity (dB)	≥55					
Wavelength Dependent Loss (dB)	≤0.3					
Operating Temperature	-40 to 85°C(-40 to 185°F)					
Storage Temperature	-40 to 85°C(-40 to 185°F)					

Technical Specification

Parameters	1x 12	1x 16	1x 24
Operating Wavelength (nm)	1260 ~ 1650		
Fiber Type	G.657A1		
Insertion Loss (dB)	≤12.5	≤13.8	≤16
Loss Uniformity (dB)	≤1.2	≤1.2	≤2.5
Polarization Dependent Loss (dB)	≤0.4	≤0.3	≤0.4
Return Loss (dB)	≥55		
Directivity (dB)	≥55		
Wavelength Dependent Loss (dB)	≤0.3		
Operating Temperature	-40 to 85°C(-40 to 185°F)		
Storage Temperature	-40 to 85°C(-40 to 185°F)		

Basics of the PLC Splitter Manufacturing Procedure

The three main components of passive optical splitter are the input and output fiber arrays, and the chip. The design and assembly of these is the key to producing a high-quality PLC splitter.



Applications Configuration Diagram

