

Single Mode Bare Fiber PLC Splitter



Description

A planar lightwave circuit (PLC) splitter is a passive optical component used to distribute or combine optical signals. It is manufactured using silica-based optical waveguide technology and features a compact size, high reliability, a wide operating wavelength range, low insertion loss, and excellent channel-to-channel uniformity.

PLC splitters are widely used in passive optical networks (PONs), fiber-to-the-home (FTTH) systems, telecommunications networks, and other optical communication applications. Firsol provides a full range of 1×N and 2×N PLC splitter products in various package types and configurations to meet different installation and application requirements.

Features

- Low Insertion Loss
- Low PDL
- High Stability and Reliability

Applications

- FTTX System
- PON Network
- CATV Link
- Optical Signal Distribution

Specifications: 1xN Bare Fiber PLC Splitter

Parameter	Unit	Value					
Port	-	1x2	1x4	1x8	1x16	1x32	1x64
Operating Wavelength Range	nm	1260-1650					
Fiber Type	-	G.657.A1					
Insertion Loss	dB	≤4.0	≤7.4	≤10.7	≤13.7	≤16.9	≤21.0
Loss Uniformity	dB	≤0.4	≤0.6	≤0.8	≤1.0	≤1.5	≤2.0
PDL	dB	≤0.2	≤0.2	≤0.2	≤0.3	≤0.3	≤0.4
Return Loss	dB	≥50					
Directivity	dB	≥55					
Wavelength Dependent Loss	dB	≤0.5	≤0.5	≤0.5	≤0.5	≤1.0	≤1.0
Temperature Stability	dB	≤0.5					
Max Power Handling	mW	500					
Package Dimensions	mm	40 x 4 x 4			50 x 7 x 4		60 x 12 x 4
Operating Temperature	°C	-20 to +85					
Storage Temperature	°C	-40 to +85					

Specifications: 2xN Bare Fiber PLC Splitter

Parameter	Unit	Value				
Port	-	2x2	2x4	2x8	2x16	2x32
Operating Wavelength Range	nm	1260-1650				
Fiber Type	-	G.657.A1				
Insertion Loss	dB	≤4.2	≤7.6	≤11.0	≤14.6	≤17.9
Loss Uniformity	dB	≤0.6	≤1.0	≤1.2	≤1.5	≤1.8
PDL	dB	≤0.2	≤0.2	≤0.2	≤0.3	≤0.3
Return Loss	dB	≥50				
Directivity	dB	≥55				
Wavelength Dependent Loss	dB	≤0.5	≤0.5	≤0.5	≤0.5	≤1.0
Temperature Stability	dB	≤0.5				
Max Power Handling	mW	500				
Package Dimensions	mm	50 x 4 x 4			60 x 7 x 4	
Operating Temperature	°C	-20 to +85				
Storage Temperature	°C	-40 to +85				

Ordering Information

 Port	 Pigtail Length	 Pigtail Diameter	 Input Connector	 Output Connector
1x2	0.5m	250µm Bare Fiber	None	None
1x4	1.0m		LC/UPC	LC/UPC
1x8	1.5m		LC/APC	LC/APC
1x16	2.0m		SC/UPC	SC/UPC
1x32			SC/APC	SC/APC
1x64			FC/UPC	FC/UPC
2x2			FC/APC	FC/APC
2x4			ST/UPC	ST/UPC
2x8			ST/APC	ST/APC
2x16				
2x32				