

PRODUCT SPECIFICATION

Product Name: 1x5 & 1x9 PLC Splitters

Product Code:

File No.:

Approval List

Title	Signature	Date		
Drafter				
Reviewer				
Approver				

Document History

VER. & STATUS	DATE	Author	DESCRIPTION OF CHANGE	APPROVER
1.0	2022-10-17		Initial release	
2.0	2023-08-17		Add 1x5 Product Types Update PLC Splitter Specifications	

PLC Splitters

SHIJIA's full line of PLC Splitters is ideal for inside/outside plant installations providing superior optical performance and field-proven environmental reliability for FTTX PON applications. PLC splitters are available in a variety of packaging options and can be offered according to customers' design and requirements.

1 Features

Low Insertion Loss and PDL Excellent IL Uniformity
Wide Operating Length Wide Operating Temperature High Reliability
Telcordia GR-1209 & GR-1221 Compliance

2 Applications

FTTX Deployments
PON Networks CATV Networks
Other applications in fiber-optic systems

3 Optical Specifications

PLC Splitter Specifications

Parameter	arameter Splitting Ratio (CH1)		IL (dB) (CH2~5)	Uniformity (dB) (CH2~5)	PDL (dB)	
	20/80	8.6	8.6	0.8	0.4	
45	50/50	4.3	10.9	0.8	0.4	
1x5	75/25	2.5	15.2	0.8	0.4	
	85/15	1.8	15.7	0.8	0.4	
Parameter	Splitting Ratio	IL (dB)	IL (dB)	Uniformity (dB)	PDL (dB)	
	(CH1)	(CH1)	(CH2~9)	(CH2~9)		
1x9	70/30	2.2	16.3	0.8	0.3	
	50/50	3.9	14.4	0.8	0.3	
Operating Wavelength (nm)		1260~1650				
Test Wavelength (nm)		1310/1550				
Return Loss (dB)		≥55 (APC or NC) ≥50 (UPC)				
Directivity (dB)		≥55				
Fiber Type		G657A1(Default)				
Fiber Length (cm)		According to customer requirements				
Operating Temperature (°C)		-40~85				
Storage Temp	erature (°C)	-40~85				

Notes:

- 1. All parameters are tested at 1310nm & 1550nm and room temperature;
- 2. The Insertion loss are tested without connector loss; Insertion loss increases 0.2dB if connectors are added;

4 Package size

4.1 Built-in device:



Steel Tube dimensions:

Parameter	Length (mm)	Width (mm)	Height (mm)
1X5	60	7	4
1X9	60	12	4

1x5:

Pigtail for Input fiber: 0.9mm white tube;

Pigtail for Output fiber: The individual spectral ratio is Blue Tube and others are white tube,

such as 85/15 then (CR85%)0.9mm Blue tube, (CR15%) 0.9mm white tube

1X9:

Pigtail for Input fiber: 0.9mm white tube;

Pigtail for Output fiber: (CR70%)0.9mm Blue tube, (CR30%) 0.9mm white tube

5 Shipment Packaging

5.1 Product Label

According to customer requirements

5.2 Template of Test List

The neutral data report format is used in the test report, take 1X5 as an example, the format as following Table:

1×5 PLC Splitter Test Sheet						
Wavelength	1260-1650nm		Inspected Date		YYYY/MM/DD	
Product Type	PLC Splitter		Serial No.			
Fiber Type				Fiber Length(m)		
Connector Type			Size(mm)		60×7×4	
Item.	IL(dB)		PDL(dB)		RL(dB)	
Wavelength(nm)	1310	1550	1310	1550	1310	1550
Port 01					PASS	PASS
Port 02					PASS	PASS
Port 03					PASS	PASS
Port 04					PASS	PASS
Port 05					PASS (PASS
Input	N/A			PASS	SS PASS	
Uniformity@port01~port04		Directivity(dB)		≥55		

5.3 Product Packaging

According to customer requirements

5.4 Packing Outer Cartons

According to customer requirements

6 Transportation

The product packaging should be suitable for any means of transportation, collision, drop, rain and snow direct and sun exposure should be avoided in transportation.

7 Storage

Products should be stored in a well-ventilated, dry warehouse without corrosive gas. Storage temperature: -40 $^{\circ}$ C ~+85 $^{\circ}$ C.