

Optical Splitter Components

Overview

Amphenol Network Solutions offers a complete line of discrete Optical Splitter Components for a wide range of uses in various optical network designs.

The product family includes splitters from 2 to 64 output fibers. Packaging has been designed to provide stable optical performance across a wide operating temperature range.

Planar Lightwave Circuit (PLC) technology is utilized for all splitters with 4 or more output fibers. Fused Biconical Taper (FBT) technology is used for splitters with 2 and 3 output fibers. Devices have been tested to Telcordia GR-209 and GR-1221 requirements. Connectors can be added to devices with 900um fiber leads.



Splitter Packaging Examples

Key Benefits

- FBT and PLC splitter types
- Low optical insertion loss
- SC and LC connectors available
- Asymmetrical split ratios available for 1x2 splitters

Specifications

Parameter	Unit	FBT Values		PLC Values				
Configuration	-	1x2 and 2x2	1x3 and 2x3	1x4	1x8	1x16	1x32	1x64
Operating Wave-length	nm	1310 / 1550 +/-40		1260—1650				
Ratio	-	Symmetrical & Asymmetrical	Symmetrical	Symmetrical				
Insertion Loss (Max) *	dB	≤3.6	<5.8	≤7.2	≤10.5	≤13.5	≤16.5	≤20.2
Uniformity *	dB	≤1.1	<1.5	≤0.5	≤0.8	≤1.2	≤1.7	≤2.0
PDL *	dB	≤0.15	≤0.3	≤0.3				
Return Loss	dB	≥50	≥50	≥55				
Directivity	dB	≥55	≥55	≥55				
Fiber Length	M	1		1				
Fiber Size	um	250 & 900 loose tube		Input	250 or 900 loose tube			
				Output	250 or 4/8 fiber ribbons			
Operating Temperature	C	-40 to 85		-40 to 85				
Dimensions [OD X Length]	mm	3 x 50		4 x 4 x 40		7 x 4 x 50		4 x 12 x 60

Configuration Generator:

ASBPSP- A B C 1 - D E FF

A. Input Ports per Device

1 = 1

2 = 2

B. Output Ports per Device (Splitter Type)

2 = 2 [FBT]

3 = 3 [FBT]

4 = 4 [PLC]

8 = 8 [PLC]

A = 16 [PLC]

B = 32 [PLC]

C = 64 [PLC]

C. Split Ratio (FBT Splitters Only)

E = Equal / Symmetrical

Note: Consult ABS for available asymmetrical split ratios

D. Fiber Size

9 = 900um color-coded semi-tight buffer

2 = 250um color-coded (ribbon outputs delaminated)

R = 250um input, ribbon output (ribbons not delaminated)

C = 2.0mm cordage

E. Fiber Length

1 = 1 meter (standard)

Note: Fiber leads are 1 meter standard. Other lengths may be available upon request.

Consult ANS for availability.

FF. Connector Type

N N = No Connectors

S 2 = SC/UPC

S 7 = SC/APC

2 1 = LC/UPC

2 6 = LC/APC

Note: Connectors are optional for 900um fibers.

Connectors are not available on 250um fibers.