

AFL Planar Lightwave Circuit (PLC)



AFL brings you the component of choice in passive optical networks - the PLC.

AFL's PLC (Planar Lightwave Circuit) combines or splits optical power in optical fiber systems. Due to their compact size, high density, excellent optical characteristics, and low cost, PLCs are fast becoming the component of choice when designing passive optical networks (PON). Low insertion loss, high output uniformity, low return loss, and low polarization dependence enable AFL's PLCs to meet the requirements for passive optical components for optical telecommunication systems.

AFL offers many splitting/combining configurations, allowing flexibility when designing an optical system while maintaining AFL's stringent quality standards.

FEATURES & BENEFITS

- Compact Size
- Low Insertion Loss
- Excellent Uniformity
- High Reliability
- Low Polarization Dependent Loss

PRODUCT APPLICATION

- Passive Optical Networks (PON)
- Fiber To The Home (FTTH)
- Fiber To The Curb (FTTC)
- CATV

RELATED PRODUCTS

- Dual Window Wide Band Couplers
- Tap Couplers
- FSM-30R12, FSM-40S Fusion Splicers
- 1310/1550 WDM

AVAILABILITY

Please contact your SSR for lead time.

CLICK HERE

for complete technical specifications, part number, and ordering information.

For pricing, availability, and additional information about this and other Passive Optical Components from Alcoa Fujikura Ltd., please call:

1-800-AFLFIBER

Alcoa Fujikura Ltd. Telecommunications Division

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Innovations to light your way.

AFL Planar Lightwave Circuit (PLC) - TECHNICAL SPECIFICATIONS

Parameter			Unit									
Operating Wavelengths			nm	1290 to 1330 and 1530 to 1570								
Type			1x8	2x8	4(1x8)	4(2x8)	1x16	2x16	2(1x16)	2(2x16)	1x32	
Insertion Loss	Typ.	dB	10.2	10.55	10.35	10.35	13.3	13.4	13.6	13.75	16.0	
	Max.	dB	11.3	11.4	11.3	11.4	14.5	15.0	14.5	15.5	17.5	
Uniformity	Min.	dB	1.1	1.7	1.1	1.7	1.5	2.2	1.5	2.2	1.9	
Return Loss	Min.	dB	55	50	50	50	50	50	50	50	50	
PDL	Max.	dB	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	
Fiber Lead Type (input)			SMF	SMFx2	SMFx4	8F-Ribbon	SMF	SMFx2	SMFx2	SMFx4	SMF	
Fiber Lead Type (output)			8 Fiber Ribbon		8 Fiber Ribbon x 4		8 Fiber Ribbon x 2		8 Fiber Ribbon x 4			
Package Dimensions	H	mm	6.0									
	W	mm	9.5									
	L	mm	65	75	65	75	65	80	65			
Fiber Length (standard)		m	1.0									
Operating Temperature		C	-40 to 85									

DESCRIPTION / PART NUMBER / ORDERING INFORMATION

P L C S M -

PLC Type

- 1 = 1 x 8
- 2 = 2 x 8
- 3 = 4(1 x 8)
- 4 = 4(2 x 8)
- 5 = 1 x 16
- 6 = 2 x 16
- 7 = 2(1 x 16)
- 8 = 2(2 x 16)
- 9 = 1 x 32

BACK