1×2(2×2) 80μm Fused Polarization Maintaining Fiber Splitter

(patent pending)

Product Description

The reduced cladding (80μm) optical fiber splitter is a passive device that splits or combines light at 1550 nm in forms of 1×2 or 2×1 for most frequent used optical routing designs. There are many various applications requiring this type of coupler such as optical amplifier, power monitoring, coherent communication and fiber gyroscope.

Features

- Compact Size
- Low Excess Loss
- High Power Handling
- High Reliability
- Low Cost

Performance Specifications

Reduced Cladding PM Fiber Splitter	Specification		Unit
	Premium	A grade	
Operation Wavelength	1550 ± 20		nm
Port Configuration	1×2 or 2×2		
Excess Loss (Typical)	≤0.4	≤0.7	dB
Excess Loss (Maximum)	≤0.6	≤0.9	dB
Polarization Extinction Ratio (Minimum)	≥18	≥16	dB
Return Loss* (Minimum)	≥50		dB
Directivity* (Minimum)	≥55		dB
Operating Power (Maximum)	≤2		W
Operating Temperature	-40 ~ +85		₀C
Storage Temperature	-50 ~ +85		₀C
Package Type (for 165 μm Bare Fiber)	⌀3.0 x L30		mm

* Test at central wavelength only
All specification are based on slow-axis alignment and without connector

Applications

- Optical Amplifier
- Power Monitoring
- Coherent Communication
- Fiber Gyroscope

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Splitting Ratio & Its Tolerance

Splitting Ratio	Maximum Splitting Ratio Tolerance (%)	
	Premium	A Grade
99/1	±0.5	±0.7
95/5	±1.5	±1.7
90/10	±2.2	±2.8
80/20	±2.5	±3.3
70/30	±3.0	±4.5
60/40	±4.0	±6.0
50/50	±5.0	±8.0

Ordering Information

FCPR-	☐☐	☐	☐	☐	1	☐	☐	☐
	Configuration	Wavelength	Grade	Package	Fiber Type	Fiber Length	Coupling Ratio	Connector
	1×2=12 2×2=22	1310=3 1550=5 1480=4 Special=0	Premium=1 A grade=2 Special=0	⌀3.0x30=1 Special=0	80/165 Bare Panda Fiber	1=0.25m 2=0.5m 3=1.0m 4=1.5m 5=2.0m 0=Special	01/99=1 05/95=2 10/90=3 20/80=4 30/70=5 40/60=6 50/50=7 Special=0	None=1 FC/PC= 2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0

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