

Single Mode In-Line Faraday Rotator



Description

An in-line fiber Faraday rotator is designed to alter the polarization state of input light, rotating the direction of the polarized light by 45 degrees upon output. Featuring low insertion loss, high return loss, and excellent environmental stability and reliability, it is widely utilized in fields such as fiber lasers, fiber amplifiers, and fiber sensing.

Features

- Low Insertion Loss
- Compact Structure
- High Stability and Reliability

Applications

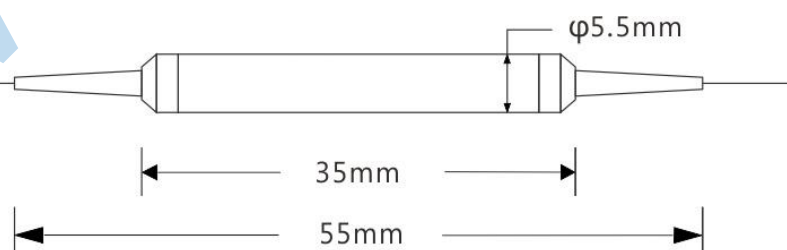
- Fiber Laser
- Fiber Amplifier
- Fiber Optic Sensing
- Fiber Interferometer

Specifications

Parameter	Unit	Value			
Center Wavelength	nm	1030	1064	1310/1480/1550	1950/2000/2050
Operating Wavelength Range	nm	±5	±5	±30	±30
Insertion Loss	dB	≤3.0	≤1.7	≤0.6	≤0.8
Return Loss	dB	≥50			
Faraday Rotation Angle (Single Pass)	°	45			
Rotation Angle Tolerance	°	±3	±3	±1	±2
Polarization Dependent Loss	dB	≤0.1			
Max Optical Power (CW)	mW	50	150	500	300
Fiber Type	-	Hi1060	Hi1060	SMF-28e	SM1950
Package Dimensions	mm	Φ5.5 x L35			
Operating Temperature	°C	-5 to +70			
Storage Temperature	°C	-40 to +85			

Notes: Tested at 25 °C. Data exclude connectors. Adding connectors will increase insertion loss by approximately 0.3 dB, reduce return loss by 5 dB.

Product Dimensions



Ordering Information

					
Center Wavelength	Max Optical Power (CW)	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
1030nm	50mW	Hi1060	0.5m	250μm Bare Fiber	None
1064nm	150mW	SMF-28e	1.0m	900μm Loose Tube	LC/UPC
1310nm	300mW	SM1950	1.5m		LC/APC
1480nm	500mW		2.0m		SC/UPC
1550nm					SC/APC
1950nm					FC/UPC
2000nm					FC/APC
2050nm					ST/UPC
					ST/APC