

Polarization Maintaining Isolator (High Extinction Ratio)



FEATURES

- ✓ Low Insertion Loss
- ✓ High Extinction Ratio
- ✓ High Return loss
- ✓ High Reliability and Stability

APPLICATIONS

- Optical Communication Systems
- Fiber Optic Instrument
- Optical Fiber Sensor
- Fiber Laser

Specifications of Polarization Maintaining Isolator (High Extinction Ratio)

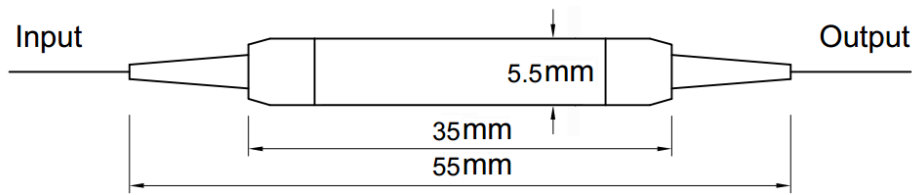
Center Wavelength (nm)	1310, 1480, 1550	
Operating Wavelength Range (nm)	±20	
Stage	Single-stage	Dual-stage
Peak Isolation @ 23°C (dB)	42	58
Isolation @ 23°C (dB)	≥28	≥48
Typ. Insertion Loss @ 23°C (dB)	0.4	0.5
Insertion Loss @ -5 ~ +70 °C (dB)	≤0.55	≤0.65
Extinction Ratio @ 23°C (only for both axis working) (dB)	≥20 (default), ≥28	≥20 (default), ≥28
Extinction Ratio @ 23°C (only for fast axis blocked) (dB)	≥25 (default), ≥30	≥25 (default), ≥30
Return Loss (dB)	≥50	
Power Handling (mW)	≤300	
Fiber Type	PM panda fiber	
Package Dimensions (mm)	Φ5.5×35	
Operating Temperature (°C)	-5 to +70	
Storage Temperature (°C)	-40 to +85	

Note:

1. The polarization maintaining isolator (high extinction ratio) is customizable, and the above specifications are subject to change without notice.
2. For device with connectors, IL is 0.3dB higher, RL is 5.0dB lower, and ER is 2.0dB lower.
3. Unless otherwise specified, the slow axis of the fiber is aligned with the key of the PM fiber connector.
4. Slow axis working and fast axis blocked as standard, while operating on both the slow and fast axis available on request.
5. Bare fiber should not support the weight of the connector. So that if connectors needed, it's better to choose the 900μm loose tube jacket instead of the 250μm bare fiber.
6. For product customization or special requirements, please contact Lfiber's sales department for availability.



Package Dimensions



Ordering Information for Polarization Maintaining Isolator (High Extinction Ratio)

Center Wavelength	Stage	Axis Alignment	Fiber Type	Pigtail Type	Fiber Length	Connector
1310nm	Single-stage	Slow axis working and fast axis blocked	PM1310	250μm bare fiber	0.5 Meter	None
1480nm	Dual-stage	Fast axis working and slow axis blocked	PM1550	900μm loose tube	0.8 Meter	FC/UPC
1550nm		Both axis working	Others		1.0 Meter	FC/APC
					1.5 Meter	SC/UPC
					Specified	SC/APC
						LC/UPC
						LC/APC
						Others

About Axis Alignment of the High Extinction Ratio Polarization Maintaining (PM) Optical Isolator

"**Slow axis working and fast axis blocked**" means that light on just the slow axis is transmitted and the fast axis light is blocked in the forward direction; Both the slow and fast axis light are blocked in the backward direction.

"**Both axis working**" means that both the slow and fast axis light are transmitted in the forward direction, both the slow and fast axis light are blocked in the backward direction.

