Flyin Polarization-Insensitive Optical Isolator

Flyin Optronics' Optical Isolator utilizes Faraday effect of Magneto optical crystal. It guides optical light in one direction and eliminates back reflection and back scattering in the reverse direction at any polarization sate.The unique manufacturing process and optical path epoxy-free design enhance the device's high power handling capability. The devices are characterized with high performance, high reliability and low cost. It has been widely used in EDFAs, Raman amplifiers, DWDM systems, Fiber lasers, transmitters and other fiber optic communication equipments to suppress back reflection and back scattering.

Features

- High Isolation
- Low Insertion Loss
- High Return Loss
- Low Polarization Sensitivity

Applications

- Fiberoptic Amplifiers
- CATV Fiberoptic Links
- Fiberoptic Systems Testing
- Fiberoptic LAN Systems
- Telecommunications

Performance Specifications

(Standard) Single Stage

Parameter	P Grade	A Grade
Operating Wavelength (nm)	1310 or 1550	
Bandwidth(nm)	±15	
Typical Isolation (dB)	40	40
Minimum Isolation (dB)	30	28
Typical Insertion Loss (dB)	0.35	0.45
Maximum Insertion Loss (dB)	0.5	0.7
Return Loss (In/Out) (dB)	≧65/60	≧55/55
PDL (dB)	≦0.05	≦0.1
PMD (dB)	0.2 (0.05 available upon request)	
Operating Temperature (℃)	-10 to +75	
Storage Temperature (℃)	-40 to +85	
Fiber Type	Corning SMF-28	
Fiber Length (Min.)	1 meter each end	
Package Dimension (mm)	Φ 5.5 x L30	
Power Handling (mW)	300	

(Standard) Dual Stage

Parameter	P Grade	A Grade

Operating Wavelength (nm)	1310 or 1550	
Typical Isolation (dB)	56	50
Minimum Isolation (dB)	45	42
Typical Insertion Loss (dB)	0.5	0.5
Maximum Insertion Loss (dB)	0.7	0.8
Return Loss (In/Out) (dB)	≧65/60	≧55/55
PDL (dB)	≦0.05	≦0.1
PMD (dB)	0.05	
Bandwidth (nm)	±30	
Operating Temperature (℃)	-10 to +75	
Storage Temperature (℃)	-40 to +85	
Fiber Type	Corning SMF-28	
Fiber Length (Min.)	1 meter each end	
Package Dimension (mm)	Φ 5.5 x L30	
Power Handling (mW)	300	

1. At 23 ℃ over bandwidth
2. Not include connector, splice and fiber-end Fresnel losses.
3. Including PDL, operating wavelength range, -5 ℃ to +75 ℃.

Dimension

Ordering Information

XX	XX	X	X	X	X	XX
Isolator Type	**Wavelength**	**Grade**	**Pigtail Style**	**Fiber Length**	**Package**	**In/Out Connector**
IS=Single stage ID=Dual stage	13=1310nm 4=1480nm 5=1550nm LB=L Band	P=Premium A=Grade A	1=Bare Fiber 2=900um jacket	1=1.0m 2=1.5m 3=2.0m 4=Custom length	B=B type	0=none 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC