

Flyin Mini 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 state. 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
- Mini Size

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)	1310,1480,1550 or customer	
Typical Isolation (dB)	40	39
Isolation (Min.) (dB)	30	28
Insertion Loss (Typ.) (dB)	0.4	0.5
Insertion Loss (Max.) (dB)	0.6	0.7
Return Loss (In/Out) (dB)	≥55/55	≥55/55
Polarization Dependent Loss (dB)	≤0.1	≤0.15
PMD (ps)	0.25 (0.05 available upon request)	
Bandwidth	±15	
Operating Temperature (°C)	-10 ~ +75	
Storage Temperature (°C)	-40 ~ 85	
Fiber Type	Corning SMF-28	
Fiber Length (Min.)	1 meter each end	
Package Dimension (mm)	Φ 3.0 x 25	
Power Handling (mW)	300	

(Standard) Dual Stage

Parameter	P Grade	A Grade
Operating Wavelength (nm)	1310,1480,1550 or customer	
Typical Isolation (dB)	56	56
Isolation (Min.) (dB)	≥42	≥40
Insertion Loss (Typ.) (dB)	≤0.5	≤0.6
Insertion Loss (Max.) (dB)	≤0.6	≤0.7
Return Loss (In/Out) (dB)	≥55/55	≥55/55
Polarization Dependent Loss (dB)	≤0.1	≤0.15
PMD (ps)	0.05	
Bandwidth	±30	
Operating Temperature (°C)	-10 ~ +75	
Storage Temperature (°C)	-40 ~ 85	
Fiber Type	Corning SMF-28	
Fiber Length (Min.)	1 meter each end	
Package Dimension (mm)	Φ 3.0 x 25	
Power Handling (mW)	300	

1. At 23 °C over bandwidth
2. Not include connector, splice and fiber-end Fresnel losses.

Dimension



Ordering Information

XX	XX	X	X	X	XX
Isolator Type	Wavelength	Grade	Pigtail Style	Fiber Length	In/Out Connector
IS=Single stage	13=1310nm 14=1480nm 15=1550nm	P=Premium A=A Grade	1=Bare Fiber 2=900um jacket	1=1.0m 2=1.5m 3=2.0m 4=Custom Length	0=none 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC