

Polarization Insensitive Inline Optical Isolator

FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

APPLICATIONS

- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- Transmitters and Fiber Lasers
- CATV Networks



SPECIFICATIONS

Parameter	Unit	Single Stage		Dual Stage	
		P Grade	A Grade	P Grade	A Grade
Center Wavelength (λ_c)	nm	1310, 1480, 1550, 1590			
Peak Isolation (Typ.)	dB	42	40	58	53
Isolation ($\lambda_c \pm 15\text{nm}$, 23°C, All SOP)	dB	≥ 32	≥ 30	≥ 45	≥ 43
Insertion Loss (λ_c , 23°C, All SOP)	dB	≤ 0.35	≤ 0.4	≤ 0.4	≤ 0.6
Insertion Loss ($\lambda_c \pm 20\text{nm}$, 0-70°C, All SOP)	dB	≤ 0.5	≤ 0.7	≤ 0.6	≤ 0.9
Optical Return Loss (Input/Output)	dB	60/55	60/55	60/55	60/55
Polarization Dependent Loss	dB	≤ 0.05	≤ 0.10	≤ 0.10	≤ 0.15
Polarization Mode Dispersion	ps	≤ 0.25	≤ 0.25	≤ 0.05	≤ 0.07
Fiber Type	-	SMF-28 Fiber or 10/130um DC Fiber (O) 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G)			
Fiber Tensile Load	N	5			
Maximum Optical Power (CW)	mW	300			
Operating Temperature	°C	0~70			
Storage Temperature	°C	-40~85			
Package Dimension	Stainless Steel Tube (SST)	mm	(Ø)5.5x35		
	Plastic Box	mm	(L)90x(W)20x(H)10		

Note: 1. SOP= State of Polarization

2. Specifications are for device without connectors; Specifications may change without notice.

3. To add connectors, IL is 0.3dB higher, RL is 5dB lower.

4. Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

ORDERING INFORMATION (PN)

FISO-	NNNN	-	C	-	(C)	(C)	C	NN	-	CC/CCC
<i>Center Wavelength</i>		<i>Stage</i>	<i>Grade</i>	<i>Package</i>	<i>Fiber Type</i>	<i>Fiber Sleeve</i>	<i>Fiber Length</i>	<i>Connector Type</i>		
1310-1310nm		S= Single Stage	P= P Grade	B=Plastic Box	O=10/130 DC Fiber	B=Bare Fiber	05=0.5m	N=Without Connector		
1550-1550nm		D= Dual Stage	A= A Grade	Blank for SST	T=12/130 DC Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector		
1480-1480nm					G=25/300 DC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector		
1590-1590nm					Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector		