

## 1310~1590nm Polarization Insensitive Inline Optical Isolator

### FEATURES

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

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks



### SPECIFICATIONS

Parameter	Unit	Single Stage		Dual Stage		
		P Grade	A Grade	P Grade	A Grade	P Grade
Center Wavelength ( $\lambda_c$ )	nm	1310, 1480, 1550, 1590				1525~1610
Peak Isolation (Typ.)	dB	42	35	58	53	50
Isolation ( $\lambda_c \pm 15\text{nm}$ , 23°C, All SOP)	dB	$\geq 28$	$\geq 26$	$\geq 45$	$\geq 43$	$\geq 30$
Insertion Loss ( $\lambda_c$ , 23°C, All SOP)	dB	$\leq 0.35$	$\leq 0.5$	$\leq 0.4$	$\leq 0.6$	$\leq 0.6$
Insertion Loss ( $\lambda_c \pm 20\text{nm}$ , 0-70°C, All SOP)	dB	$\leq 0.55$	$\leq 0.7$	$\leq 0.65$	$\leq 0.9$	$\leq 0.8$
Optical Return Loss (Input/Output)	dB	60/55	60/55	60/55	60/55	60/55
Polarization Dependent Loss	dB	$\leq 0.05$	$\leq 0.10$	$\leq 0.10$	$\leq 0.15$	$\leq 0.15$
Polarization Mode Dispersion	ps	$\leq 0.25$	$\leq 0.25$	$\leq 0.05$	$\leq 0.07$	$\leq 0.07$
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	$\phi 5.5 \times L^1 35$			
	Plastic Box-Q	mm	$L^1 90 \times W^1 20 \times H^1 10$			

**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)	C	NN	-	CC/CCC
Center Wavelength	Stage	Grade	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type			
1310~1310nm	S= Single Stage	P= P Grade	Q=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			
1590~1590nm				G=25/300 DC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector			
CL=1525-1610nm				Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector			