1310~1590nm Inline Faraday Rotator with Phase Bias

FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stabilit

APPLICATIONS

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

SPECIFICATIONS

Parameter		Unit	Value
Center Wavelength (λc)		nm	1310, 1480, 1550, 1590
Operating Wavelength Range		nm	+/-15
Typical Insertion Loss		dB	0.6
Max. Insertion Loss		dB	1.0
Faraday Rotate Angle	A: FR+WP+FR	deg	90 (Backward Signal to Slow axis of Input Fiber)
(Single Transmission)	B: WP+FR	deg	45 (Backward Signal to Fast axis of Input Fiber)
Phase Bias between Forward and Backward		-	π, π/2, π/4 or specify
Optical Return Loss (Input/Output)		dB	50/50
PDL (For SM Fiber)		dB	≤0.15
Extinction Ratio	Standard	dB	≥20
(For PM Fiber)	High ER Type	dB	≥22 (Can only work in Slow Axis)
Fiber Type	SM 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)
	PM Fiber Type	-	PM1310/1550 Panda Fiber or 10/125um PMDC Fiber (O) 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q) 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)
Fiber Tensile Load		N	5
Max. Optical Power (CW)		mW	300
Operating Temperature		°C	0~70
Storage Temperature		°C	-40~85
Package	Stainless Steel Tube (SST)	mm	(Ø)5.5x35
Dimension	Metal Box	mm	(L)120x(W)12x(H)10

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

2. To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.

3. Forward/backward signals transmit through fast axis/slow axis of a waveplate (WP) induces the phase bias.

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)

FRPB-NNNN - C N (C) C C -(C) (C) C NN -CC/CCC

Center Wavelength	*Rotate Angle*	*Phase Bias*	*Type*	*Input Fiber*	*Output Fiber*	*Package*	*Fiber Type*	*Fiber Sleeve*	*Fiber Length*	*Connector Type*
1310=1310nm	A=90	1=π	R=High ER	S=SM Fiber	S=SM Fiber	M=Metal Box	0=10/130DC Fiber	B=Bare Fiber	05=0.5m	N=Without Connector
1480=1480nm	B=45	2=π/2	*Blank* for	P= PM Fiber	P= PM Fiber	*Blank* for SST	T=12/130DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
1550=1550nm		4=π/4	Standard			or >10W	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
							or PM1310/1550 Fiber			