1040nm Inline Faraday Rotator with Phase Bias

FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- Low Polarization Sensitivity
- Compact Size

APPLICATIONS

- Fiber Optic Amplifiers
- Sensing Systems
- Telecommunication Networks
- LAN Systems
- Research Labs

SPECIFICATIONS

Parameter		Unit	Value
Center Wavelength (CW)		nm	1040
Bandwidth		nm	+/-5
Insertion Loss		dB	≤3.0 (Type B), ≤5.6 (Type A)
Rotate Angle (Single Transmission)	A: FR+WP+FR	deg	90 (Backward Signal to Slow axis of Input Fiber)
	B: WP+FR	deg	45 (Backward Signal to Fast axis of Input Fiber)
Rotation Angle Tolerance (CW. 23°C)		Deg	≤+/-5
Phase Bias between Forward and Backward		-	π, π/2, π/4 or specify
Return Loss		dB	≥50
PDL (for SM Fiber Type)		dB	≤0.25
Extinction Ratio (for PM Fiber Type)	Standard	dB	≥20
	High ER Type	dB	≥22 (Can only work in Slow Axis)
Fiber Type	SM Fiber Type	-	HI1060 Fiber or 10/125um SC Fiber (E) 10/125um DC Fiber (O), 15/130um DC Fiber (W) 20/130um DC Fiber (Q) or 25/250um DC Fiber (R)
	PM Fiber Type	-	PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L) 10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W) 20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R)
Fiber Tensile Load		N	5
Max. Optical Power (CW, Forward+Backward)		mW	100
Operating Temperature		°C	0~50
Storage Temperature		°C	-40~85
Package Dimension	Stainless Steel Tube (SST)	mm	Ø5.5xL38
	Metal Box	mm	L120xW12xH10

Note: 1. Specifications are for device without connectors; Specifications may change without notice.
2. To add connectors, IL is 0.5dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
4. Forward/backward signals transmit through fast axis/slow axis of a waveplate induces the phase bias.
5. 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
1040=1040nm	A=90	1=π	R=High ER	S=SM Fiber	S=SM Fiber	M=Metal Box	E=10/125 SC or PM1060L Fiber	B= Bare Fiber	05=0.5m	N=Without Connector
	B=45	2=π/2	Blank for	P= PM Fiber	P= PM Fiber	Blank for SST	Q=20/130 DC or PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
		4=π/4	Standard				R=25/250 DC or PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
							Blank for HI1060 or PM980 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector