975-1000nm High Power Inline Faraday Rotator with Phase Bias for Pulse Power

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	975, 980, 990, 1000
Bandwidth		nm	+/-10
Insertion Loss (Typ.)		dB	0.8
Insertion Loss (Max.)		dB	1.5
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)
	C: PBS+FR+WP+MR	deg	90 (Backward Signal to Slow axis of Input Fiber)
Phase Bias between Forward and Backward		-	π, π/2, π/4 or specify
Return Loss		dB	≥50
PDL (for SM Fiber Type)		dB	≤0.20
Extinction Ratio (for PM Fiber Type)	Standard	dB	≥18
	High ER Type	dB	≥20 (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) or 15/130um PMDC Fiber (W)
			20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R)
Fiber Tensile Load		N	5
Max. Average Power (Forward+Backward)		W	0.3, 0.5, 1, 2, 3, 5, 10, 15, 20, 30, 40, 50
Max. Peak Power for Pulse		kW	0.1, 1, 2, 3, 5, 10, 15, 20
Operating Temperature		°C	0~50
Storage Temperature		°C	-20~75

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.

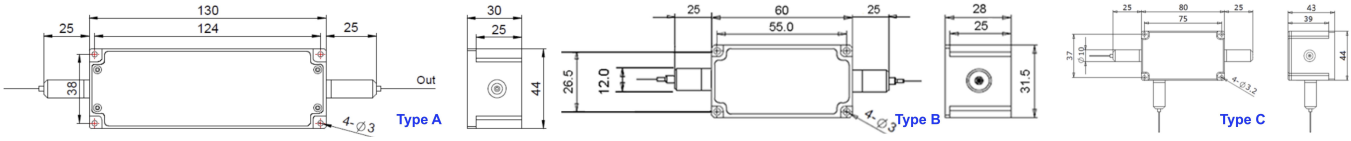
3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.

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.

6. Package size may be different for difference optical power.

Dimension Drawing



Ordering Information (PN)

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

Center Wavelength	Rotate Angle	Phase Bias	Type	Input Fiber	Output Fiber	Average Power	Peak Power	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
975=975nm	A=90	1=π	R=High ER	S=SM Fiber	S=SM Fiber	03=300mW	01=100W	E=10/125 SC or PM1060L Fiber	B= Bare Fiber	05=0.5m	N=Without Connector
980=980nm	B=45	2=π/2	*Blank* for	P= PM Fiber	P= PM Fiber	1= 1W	1= 1kW	Q=20/130 DC or PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
990=990nm	C=90	4=π/4	Standard			5=5W	5=5kW	R=25/250 DC or PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1000=1000nm						10=10W	20=20kW	*Blank* for HI1060 or PM980 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector