

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

FEATURES

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

APPLICATIONS

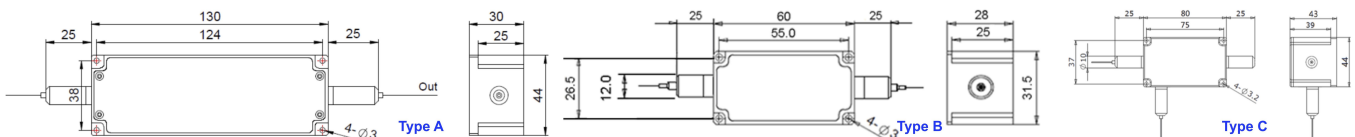
- Fiber Optic Amplifiers
- Sensing Systems
- Telecommunication Networks
- LAN Systems
- Research Labs

SPECIFICATIONS

Parameter	Unit	Value	
Center Wavelength (CW)	nm	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 , $\pi/2$, $\pi/4$ 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. Optical Power (CW, Forward+Backward)	W	0.5, 1, 2, 3, 5, 10, 15, 20, 30, 40, 50	
Operating Temperature	°C	0~50	
Storage Temperature	°C	-20~75	

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
 - To add connectors, IL is 0.5dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
 - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
 - Forward/backward signals transmit through fast axis/slow axis of a waveplate induces the phase bias.
 - 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.
 - Package size may be different for difference optical power.

DIMENSION DRAWING



ORDERING INFORMATION (PN)

FRPB-NNNN-	C	N	(C)	C	C	-HPNN	-(C)	C	NN	-CC/CCC
Center Wavelength	Rotate Angle	Phase Bias	Type	Input Fiber	Output Fiber	Optical Power	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
975-975nm	A=90	1= π	R=High ER	S=SM Fiber	S=SM Fiber	1=1W	E=10/125 SC or PM1060L Fiber	B=Bare Fiber	05=0.5m	N=Without Connector
980-980nm	B=45	2= $\pi/2$	Blank for	P=PM Fiber	P=PM Fiber	5=5W	Q=20/130 DC or PMDC Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector
990-990nm	C=90	4= $\pi/4$	Standard			10=10W	R=25/250 DC or PMDC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1000-1000nm						50=50W	Blank for HI1060 or PM980 Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector