

# 1040nm Faraday Mirror with Phase Delay for Pulse Power

## FEATURES

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

## APPLICATIONS

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

## SPECIFICATIONS

Parameter	Unit	Value	
Center Wavelength	nm	1040	
Bandwidth	nm	+/-5	
Insertion Loss (Max.)	dB	5.6 (B Type), 10.2 (A Type)	
Faraday Rotation	A: FR+WP+FR deg	90 (Slow axis in and Slow axis Out)	
Angle (Single Pass)	B: WP+FR deg	45 (Slow axis in and Fast axis Out)	
Phase Delay	-	$\pi$ , $\pi/2$ , $\pi/4$ or specify	
Rotation Angle Tolerance (1030nm, 23°C)	Deg	+/-5	
PDL (for SM Fiber Type)	dB	≤0.25	
Extinction Ratio (for PM Fiber Type)	dB	≥18	
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	
Maximum Average Power	mW	50	
Max. Peak Power for Pulse	kW	0.1, 1, 2, 3, 5, 10, 15, 20	
Operating Temperature	°C	0~50	
Storage Temperature	°C	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	(Ø)5.5x35
	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 0.5dB 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 (WP) induces the phase delay.
  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)

FRMD-NNNN-	C	N	C - H	NNN	P NN	-(C)	(C)	C	NN	- CC/CCC
Center Wavelength	Rotation Angle	Phase Delay	Type	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
1040-1040nm	A=90	1= $\pi$	P=PM Fiber	005=50mW	01=100W	M=Metal Box	E=10/125 SC or PM1060L Fiber	B= Bare Fiber	05=0.5m	N=Without Connector
	B=45	2= $\pi/2$	S=SM Fiber		1=1kW	Blank for SST	Q=20/130 DC or PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
		4= $\pi/4$			5=5kW		R=25/250 DC or PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
					10=10kW		Blank for HI1060 or PM980 Fiber	3= 3mm Cable	20=2.0m	SC/UFC=SC/UFC Connector