

1310~1590nm 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
- LAN Systems

SPECIFICATIONS

Parameter	Unit	Value	
Center Wavelength (λ_c)	nm	1310, 1480, 1550, 1590	
Bandwidth	nm	+/-15	
Insertion Loss	(Typ.)	0.5	
	(Max.)	0.9	
Faraday Rotation Angle (Single Pass)	deg	90 (Slow axis in and Slow axis Out)	
	deg	45 (Slow axis in and Fast axis Out)	
Phase Delay	-	π , $\pi/2$, $\pi/4$ or specify	
Rotation Angle Tolerance (23°C, λ_c)	Deg	$\leq \pm 3$	
Polarization Dependent Loss (SM Fiber Type)	dB	≤ 0.15	
Extinction Ratio (PM Fiber Type)	ps	≥ 18	
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. Average Optical Power	W	0.3, 0.5, 1, 2, 3, 5, 10	
Max. Peak Power for Pulse	kW	0.1, 1, 2, 3, 5, 10, 15, 20	
Operating Temperature	°C	0~70	
Storage Temperature	°C	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	(\varnothing)5.5x35 ($\leq 5W$); (\varnothing)6.0x48 (5~10W)
	Metal Box	mm	(L)120x(W)12x(H)10

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
 - To add connectors, IL is 0.3dB 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 (WP) induces the phase delay.
 - 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 NN	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
1310-1310nm	A=90	1= π	P=PM Fiber	03=300mW	01=100W	M=Metal Box	O=10/130DC or 10/125PMDC Fiber	B=Bare fiber	05=0.5m	N=Without Connector
1480-1480nm	B=45	2= $\pi/2$	S=SM Fiber	1=1W	1=1kW	Blank for SST	T=12/130DC or PMDC Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector
1550-1550nm		4= $\pi/4$		5=5W	5=5kW		G=25/300 DC or PMDC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1590-1590nm				10=10W	10=10kW		Blank for SMF-28 Fiber or PM1310/1550 Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector

