

1780nm Faraday Rotator Mirror

1780nm Faraday Rotator Mirror is a fiber component which can change state of polarization (SOP), the polarization light will rotate 45° when the input light passes the faraday rotator, and will rotate another 45° after the mirror turns the light back, the output light will have a polarization state rotated 90°, and orthogonal to the input polarization state. It's widely used in Fiber Laser, Fiber Amplifier System and Fiber Optic Sensor. High power version is available upon request.

Application:

Fiber Optic Amplifier
Fiber Optic Sensor
Fiber Laser
Lab And Research

Features:

High Extinction Ratio
High Power Available
Low Insertion Loss
High Reliability



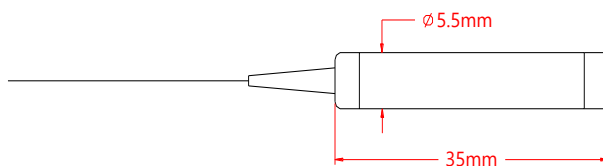
Specification:

Parameter	Symbol	Value		Unit
Center Wavelength	λ	1780		nm
Bandwidth	BW	± 15		nm
Faraday Rotate Angle (Single Pass)		45 ± 3	90 ± 3	Degree
Typ. Insertion Loss	IL	0.5	0.8	dB
Max. Insertion Loss	IL	0.9	1.2	dB
Min. Extinction Ratio (for PM fiber)	ER	18		dB
Max. PDL (for SM fiber)	PDL	0.15		dB
Max. Optical Power (CW)	P	500 or specify		mW
Max. Tensile Load		5		N
Fiber Type		PM Panda or SM fiber		-
Operating Temperature	T	$-5 \sim 70$		°C
Storage Temperature	T	$-40 \sim 85$		°C
Package Dimension		$\Phi 5.5 \times L35$		mm

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, ER will be 2dB lower, slow axis is default aligned to the connector key.

Drawing:



Ordering Information (Part Number):

FRM-**WWWW**-**A**-**FF**-**J**-**LL**-**CC**

WWWW	A	FF	J	LL	CC
Wavelength	Rotate Angle	Fiber Type	Fiber Jacket	Fiber Length	Connector
1700 - 1700nm	4 - 45° (Total 90°)	P5 - PM 1550	B - 250um Bare Fiber	05 - 0.5m	NE - None
1720 - 1720nm	9 - 90° (Total 180°)	P9 - PM 1950	9 - 900um Loose Tube	10 - 1.0m	FA - FC/APC
1750 - 1750nm		S2 - SM-28e	2 - 2.0mm Loose Tube	15 - 1.5m	FU - FC/UPC
1760 - 1760nm		S9 - SM 1950	3 - 3.0mm Loose Tube	20 - 2.0m	SA - SC/APC
1780 - 1780nm				SS - Specify	SU - SU/APC
SSSS - Specify					LA - LC/APC
					LU - LC/UPC
					SS - Specify