

458nm TGG Fiber Faraday Rotator

458nm TGG Fiber Faraday Rotator is a fiber component which can change state of polarization (SOP), the output polarization light will rotate 45° or 90° when the input light passes faraday rotator, It's widely used in Quantum Communication System and Fiber Optic Sensor. High power type is available upon request.

Application:

Quantum Communication
Fiber Optic Sensor
Fiber Laser
Lab And Research

Features:

High Extinction Ratio
High Power Available
Low Insertion Loss
High Reliability



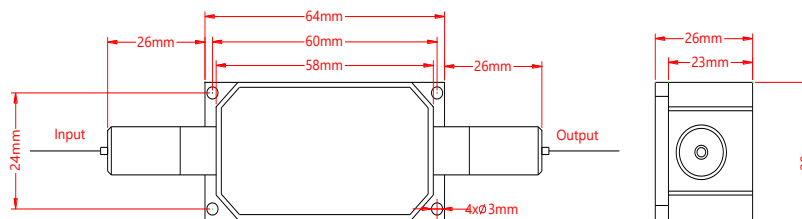
Specification:

Parameter	Symbol	Value		Unit
Center Wavelength	λ	458		nm
Bandwidth	BW	± 5		nm
Faraday Rotate Angle		45 ± 3	90 ± 3	Degree
Typ. Insertion Loss	IL	0.9	1.2	dB
Max. Insertion Loss	IL	1.2	1.5	dB
Min. Extinction Ratio (for PM fiber output)	ER	18		dB
Max. PDL (for SM fiber output)	PDL	0.15		dB
Min. Return Loss	RL	50		dB
Max. Optical Power (CW)	P	500 or specify		mW
Max. Tensile Load		5		N
Fiber Type		PM Panda fiber or SM fiber		-
Operating Temperature	T	$-5 \sim 70$		°C
Storage Temperature	T	$-40 \sim 85$		°C
Package Dimension				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, RL will be 5dB lower, ER will be 2dB lower, slow axis is default aligned to the connector key.

Drawing:



Ordering Information (Part Number):

TFR-**WWW**-**A**-**FF**-**J**-**LL**-**CC**

WWW	A	FF	J	LL	CC
Wavelength	Rotate Angle	Fiber Type (Input/Output)	Fiber Jacket	Fiber Length	Connector
405 - 405nm	4 - 45°	PP - PM fiber on input and output port	B - 250um Bare Fiber	05 - 0.5m	NE - None
410 - 410nm	9 - 90°	SS - SM fiber on input and output port	9 - 900um Loose Tube	10 - 1.0m	FA - FC/APC
420 - 420nm		PS - PM fiber on input	2 - 2.0mm Loose Tube	15 - 1.5m	FU - FC/UPC
430 - 430nm		SM fiber on output	3 - 3.0mm Loose Tube	20 - 2.0m	SA - SC/APC
440 - 440nm		SP - SM fiber on input		SS - Specify	SU - SU/APC
450 - 450nm		PM fiber on output			LA - LC/APC
458 - 458nm					LU - LC/UPC
SSS - Specify					SS - Specify