



Free Space Faraday Rotator and Isolator



Faraday Rotator is an optical device based on the Faraday effect.

The linearly polarized light input can be rotated to specified angles, and the direction is only related to the internal magnetic field.

Optical Isolator is made of three parts, an input polarizer, a Faraday rotator, and an output polarizer. It is an optical component which allows the transmission of light in only one direction. It is widely used for amplified lasers, mode-locked lasers and optical test instrumentation.

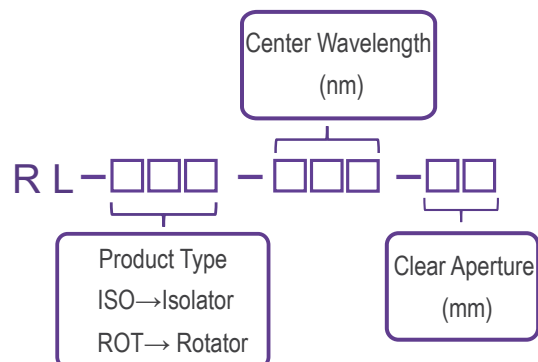
Key Features

- ◆ High isolation
- ◆ Low insertion loss
- ◆ Various clear aperture
- ◆ Double escape ports
- ◆ Various wavelength options
- ◆ Output polarization states adjustable

Applications

- Amplified laser
- Mode-locked laser
- Semiconductor laser
- Optical test instrumentation
- Optical parametric oscillator

Part Numbering Schema

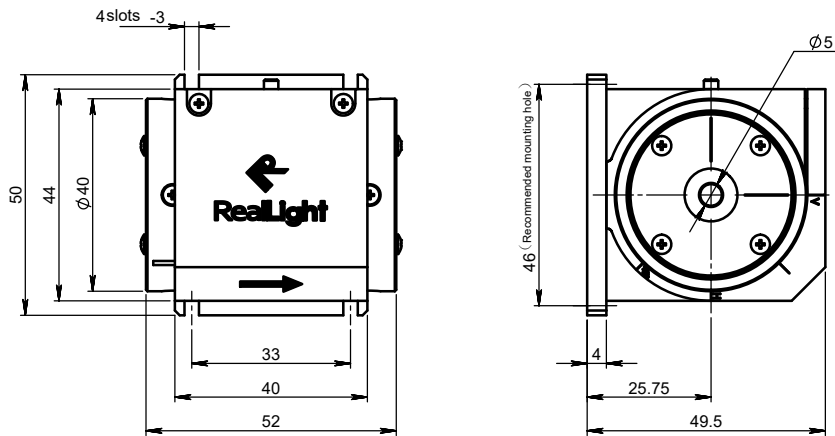


Technical Specifications

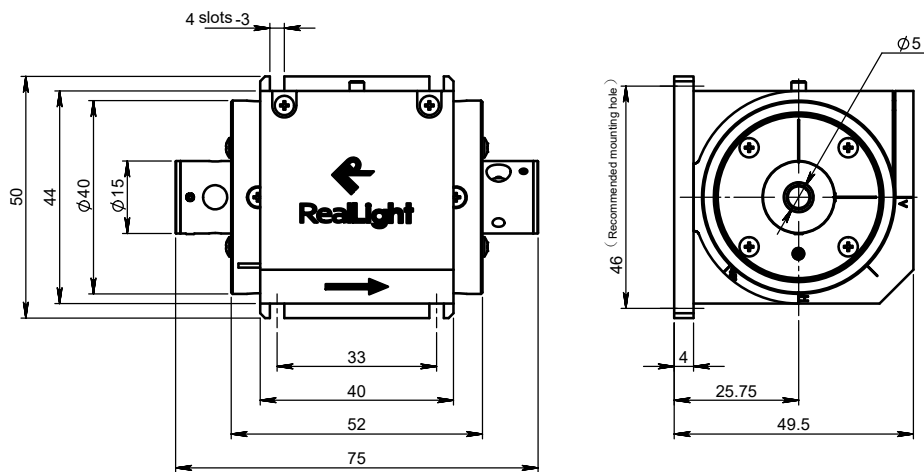
Product	Part No.	Wavelength	Clear Aperture	Rotation Angle @25°C	Extinction @25°C	Transmission @25°C	Damage Threshold @10ns
Rotator	RL-ROT-1030-2.5	1030nm	2.5mm	45°±1°	>30dB	>95%	5J/cm ²
	RL-ROT-1030-5		5mm				
	RL-ROT-1064-2.5	1064nm	2.5mm				
	RL-ROT-1064-5		5mm				

Product	Part No.	Wavelength	Clear Aperture	Isolation @25°C	Transmission @25°C	Polarizer	Damage Threshold @10ns
Isolator	RL-ISO-1030-2.5	1030nm	2.5mm	>30dB	>90%	PBS Cube	5J/cm ²
	RL-ISO-1030-5		5mm				
	RL-ISO-1064-2.5	1064nm	2.5mm				
	RL-ISO-1064-5		5mm				

Mechanical Drawings (in mm)



Rotator



Isolator