

The Coherent MESOS line of Faraday devices builds on over 30 years of experience in successfully protecting lasers from destabilizing and potentially damaging back reflections. These products have been specifically designed to meet the needs of the 4.5 μm (4500 nm to 4600 nm) laser market.

Our MESOS rotators and isolators deliver industry-best laser reliability and performance while providing superior isolation and maintaining very high transmission.

Our MESOS products rely on the Faraday effect from high Verdet constant, low absorption materials to rotate the plane of linearly polarized light in the forward direction and an additional 45° of non-reciprocal rotation in the reverse direction. When these Faraday rotators are placed between crossed polarizers, they can be used as a Faraday Isolator. The MESOS is available as a rotator or an isolator.

Features

- Completely passive; no tuning required
- Stable performance to 2.5 W
- Rugged design suitable for harsh operating environments
- All isolators contain rejected beam escape ports; all rejected beams are deflected at 90°

Options

- Input/Output waveplates can be included to adjust for various linear polarization angles
- Customization requests encouraged

Applications

- Environmental Sensing
- Spectroscopy
- Medical Systems, Research, and Device Manufacturing

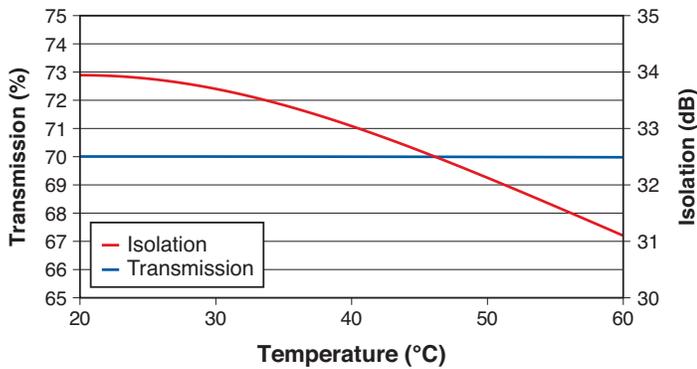


SPECIFICATIONS

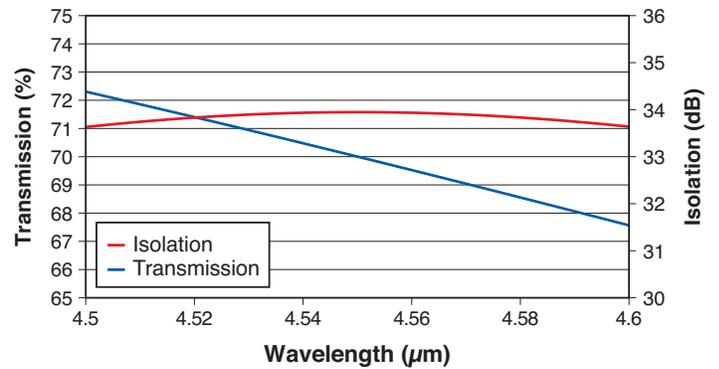
	Rotator	Isolator
Clear Aperture (mm)	4	4
Transmission at 22 °C (%)	>70	>65
Isolation at 22 °C (dB)	N/A	>30
Power Handling	2.5	2.5

NOTE: Return loss-free working distance ≥ 25 mm for a collimated beam.

Typical 4550 nm Isolator Performance



Typical 4550 nm Isolator Performance



Coherent, Inc.,
 5100 Patrick Henry Drive Santa Clara, CA 95054
 p. (800) 527-3786 | (408) 764-4983
 f. (408) 764-4646

tech.sales@coherent.com www.coherent.com

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. All products are RoHS compliant.

Coherent offers a limited warranty for all MESOS Rotators and Isolators. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. Copyright ©10/21 Coherent, Inc.