Compact Optical Isolators

532 nm to 785 nm

Newport's Compact optical isolators are designed for wide ranging end applications where optical feedback can adversely affect laser performance. Compact isolators provide high transmission in the forward direction while-strongly attenuating light traveling in the reverse direction, protecting lasers from the harmful effects of back reflections.

Our Compact isolator solutions deliver industry-best laser reliability and performance. This family of isolators covers a broad range of wavelengths - from the UV at 405 nm to the near-infrared at 1064 nm. A range of isolators is available which allow for optimal isolation and transmission at specific wavelengths, depending on the model, and within the spectral bandwidth of the isolator. Our standard models are available at wavelengths common to many applications.

Some common applications for the Compact are the elimination of frequency instability in single frequency lasers such as laser diodes and OPSLs, the prevention of mode-hopping in external cavity diode lasers, and the elimination of parasitic oscillations due to ASE in amplified laser systems.

Compact isolators contain optically contacted polarizing beam splitter cubes resulting in high transmission as compared to other available isolators. The Compact's industry-leading high transmission results in more photons for your application. This allows diodes to be run at lower currents extending diode lifetime. The compact design makes it highly suitable for OEM integration.

Applications

- Raman Spectroscopy
- DNA Sequencing
- Imaging
- Environmental Sensing
- Mapping
- Microscopy
- 3D Metrology
- Protecting pump lasers in amplified systems

Product Features

- High transmission
- Extends the life of your diode
- Compact design

Options:

- Optional waveplate for manipulation of polarization
- Mounting Clamp Available
- Customization available.

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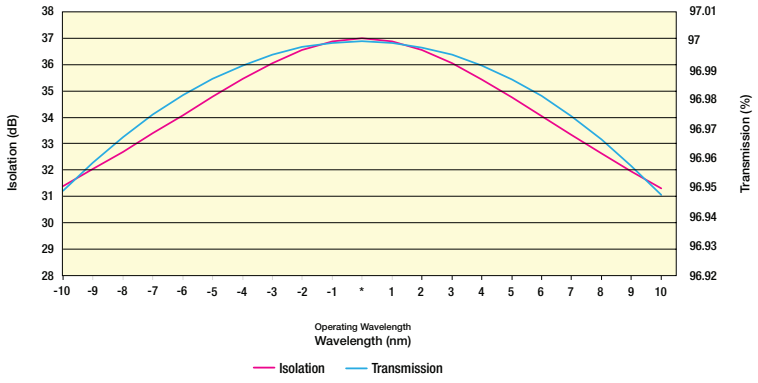
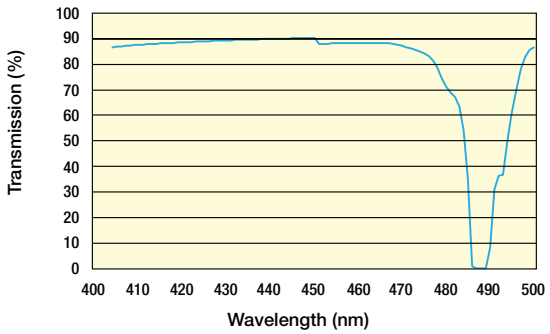
Standard Wavelength	Specified Range	Tunable Temperature	Isolation	Transmission	Forward Power Handling
532 nm	522 nm to 542 nm	10 °C to 30 °C	>33 dB	>95%	5W
638 nm	628 nm to 648 nm	10 °C to 30 °C	>33 dB	>95%	5W
785 nm	775 nm to 795 nm	10 °C to 30 °C	>33 dB	>95%	5W

Product specifications subject to change.

Typical Isolator Performance



400 nm to 500 nm Transmission



www.NEWPORT.com • sales@newport.com
+1-949-863-3144 • +1-877-835-9620