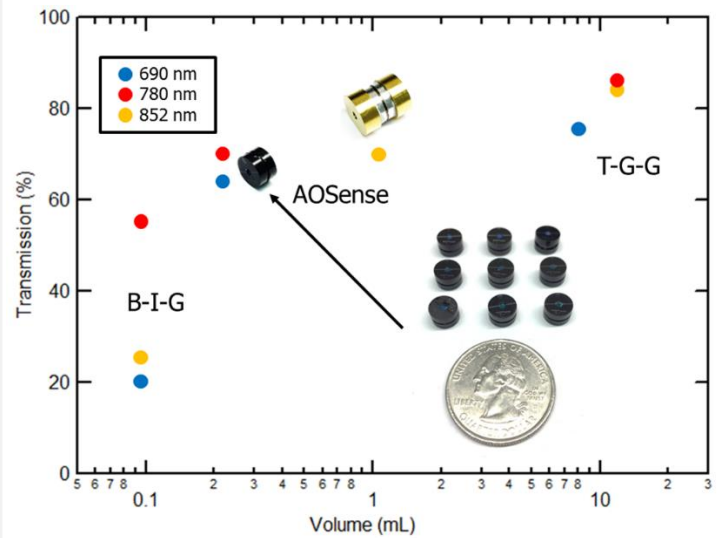


780 nm Miniature Optical Isolators

AOSense offers single and dual-stage, free-space optical isolators at 780 nm and 852 nm for enhanced isolation. The innovative, small package size enables integration into compact laser sources and amplifiers without sacrificing transmission efficiency. The low external magnetic field enables the isolator to tightly integrate into systems with high magnetic-field sensitivity such as atomic spectrometers, magnetometers, clocks, and cold-atom devices.



Features

- 🌀 **VIS-NIR isolators: 780 nm, T > 65%, E.R. > 30 dB, Vol < 0.3 cm³**
- 🌀 **Dual stage isolators at 852 nm: T > 54%, E.R. > 48 dB**
- 🌀 **Low loss compared to Bismuth Iron Garnets, small compared to TGG**
- 🌀 **Suitable for 600-860 nm**

Specifications

Miniature single-stage isolator – 780 nm

Transmission	>54%
Extinction ratio	>48 dB ^(a) , >60 dB ^(b)
Wavelength	780 nm ± 1 nm
Volume	830 mm ³
Clear aperture	1.4 mm diameter
Maximum power	>200 W/cm ² ^(c)
Stray magnetic field	TBD ^(d)

(a) Free-space measurement with 0.26 mm beam diameter. Detector subtends 0.03 sr. Larger beam sizes may result in a different extinction ratio.

(b) Measured using fiber coupling in/out. Fiber coupling is >80%.

(c) Based on limited testing. Actual value is likely higher.

Miniature dual-stage isolator – 852 nm

Transmission	>54%
Extinction ratio	>48 dB ^(a) , >60 dB ^(b)
Wavelength	780 nm ± 1 nm
Volume	830 mm ³
Clear aperture	1.4 mm diameter
Maximum power	>200 W/cm ² ^(c)
Stray magnetic field	TBD ^(d)

(a) Free-space measurement with 0.26 mm beam diameter. Detector subtends 0.03 sr. Larger beam sizes may result in a different extinction ratio.

(b) Measured using fiber coupling in/out. Fiber coupling is >80%.

(c) Based on limited testing. Actual value is likely higher.

For more information, contact us at sales@aosense.com.

Optics

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