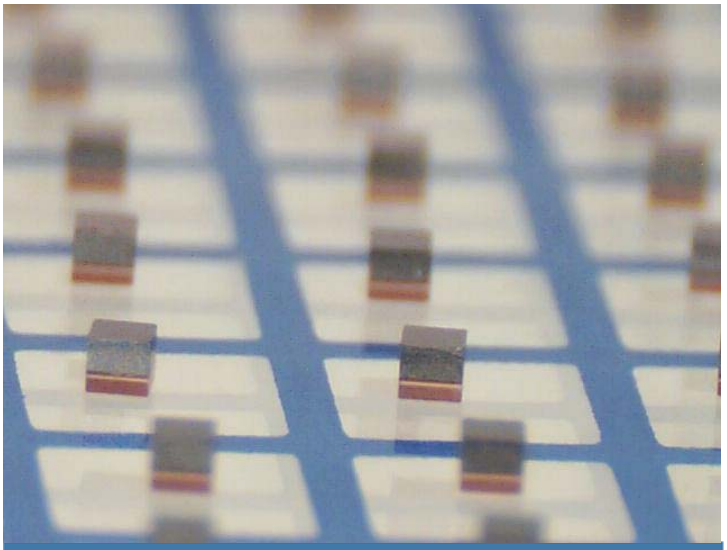


Nano-Optic Isolator

Applications

- **Telecom/Datacom Transceivers**
- **Metro, Access, Long-Haul**
- **Optical Transmitters**
- **Laser Diode Packages**

Benefits

- **Reduced Size ⇒ lower cost**
- **Improved Reliability ⇒ lower cost**
- **Square Size ⇒ lower cost**

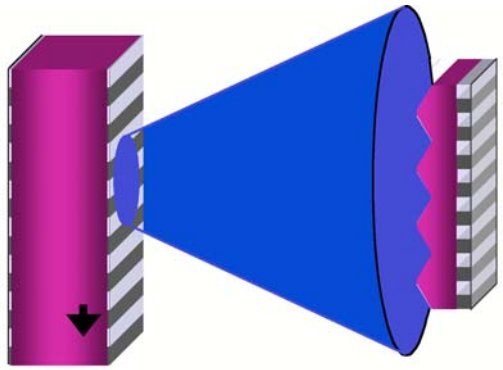
Description

Nano-Optic isolators are manufactured with a polarizing nanostructure on one surface, and an absorptive polarizer on the other surface.

NanoOpto's Nano-Optic Isolators address the requirements to prevent light in the optical communications networks from scattering back into the lasers and degrading the output power and wavelength stability. It provides the same functionality as existing optical isolators, allowing only one-way light transmission, in a form with compelling physical and fiscal advantages.

Conventional isolators consist of multiple polarizers and Faraday Rotators laminated together. Their polarizing components alone can measure up to 0.5 mm thick. By contrast, NanoOpto fabricates a submicron-thick polarizing nanostructure directly on the surface of a Faraday Rotator. Our current isolators are 25 to 30% thinner than conventional isolators, leading to substantial cost savings.

Moreover, because NanoOpto's manufacturing process derives from high-volume manufacturing, customers can anticipate ongoing component cost reductions as production volume rises.



Polarizing nanostructures are 0.5% the thickness of the conventional polarizers used in current isolator manufacturing processes. Use of the thinner polarizing nanostructures enables isolators to be manufactured in smaller configurations, and dramatically lowering pricing.

ISL Series

Part Number	CA	Dimensions	Wavelength	Temperature	Isolation*	I/L**
ISL-006-006-OD-00S	0.04 mm	0.51 x 0.51 x 0.50 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
ISL-007-007-OD-00S	0.50 mm	0.59 x 0.59 x 0.50 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
ISL-008-008-OD-00S	0.60 mm	0.82 x 0.82 x 0.50 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
ISL-006-006-CD-00S	0.04 mm	0.51 x 0.51 x 0.70 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
ISL-007-007-CD-00S	0.50 mm	0.59 x 0.59 x 0.70 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
ISL-008-008-CD-00S	0.60 mm	0.82 x 0.82 x 0.70 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB

* Median Isolation over wavelength and temperature
** Maximum isolation over wavelength and temperature

IGL Series

Part Number	CA	Dimensions	Wavelength	Temperature	Isolation*	I/L**
IGL-006-006-OD-00S	0.04 mm	0.51 x 0.51 x 0.65 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
IGL-007-007-OD-00S	0.50 mm	0.59 x 0.59 x 0.65 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
IGL-008-008-OD-00S	0.60 mm	0.82 x 0.82 x 0.65 mm	1290 to 1330 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
IGL-006-006-CD-00S	0.04 mm	0.51 x 0.51 x 0.85 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
IGL-007-007-CD-00S	0.50 mm	0.59 x 0.59 x 0.85 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB
IGL-008-008-CD-00S	0.60 mm	0.82 x 0.82 x 0.85 mm	1530 to 1565 nm	0 to 85 ˚C -40 to +85 ˚C	19 dB 17 dB	0.30 dB

* Median Isolation over wavelength and temperature
** Maximum isolation over wavelength and temperature

⚠ all specifications and dimensions are subject to change without notice

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