



kW, 450nm to 2400nm, >100nm broadband



DATASHEET





The OIHF is designed for kilowatt-class laser systems with a single polarization. With Agiltron's proprietary configuration, these isolators feature unique compensation technologies for thermal lensing and wavelength shifts under intense optical radiations as well as efficient internal cooling apparatus. Moreover, It has broadband operations: over 100nm with isolation > 40dB and over 300nm > 30dB. The optical isolators cover a wide wavelength range of 450nm to 2450nm. The standard wavelength is centered at 1550nm. A built-in output tap monitor is an option. Agiltron has a volume isolator production operation for making custom-specific designs with specially-designed testing tools.

Features

- Broadband
- Large Aperture
- Low Loss
- High Reliability
- KW Optical Power Handling
- Polarization Dependent Input

Applications

- Laser System
- Lab Use
- Instruments

Specifications

Parameter	Min	Typical	Max	Unit	
Center Wavelength	450		2400	nm	
Wavelength Range (± center)	100	150	270	nm	
Insertion Loss [1]	0.3	0.5	0.7	dB	
Return Loss	50			dB	
Isolation	30	40	45	dB	
Forward Optical Power (CW) [2]			1	kW	
Backward Optical Power(CW) [3]			100	mW	
Aperture		10		cm	
Operating Temperature	-5		60	°C	
Storage Temperature	-40		85	°C	
Mounting Adaptor Available					

- [1]. For 1550nm, other wavelengths may have a higher loss.
- [2]. CW
- [3]. CW

Note: For a polarized input light version, the isolation is optimized to block the light reflection of the same polarization. Although lights of other polarizations may also be blocked, the extinction may be poor. PM isolators can be specially made to block backward propagating lights of all polarizations. PM isolators can also be made with a light polarizing function.

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Ordering Information

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Prefix	Туре	Wavelength	Aperture	Package	Forward Power	Backward Power	Front Polarizer	Back Polarizer	Quartz Compensator
OIHF-		1060nm = 1 1310nm = 3 1550nm = 5 2000nm = 2 980nm = 9 850nm = 8 780nm = 7 650nm = 6 450nm = 4	3cm = 3 10cm = 1 Special = 0	Regular = 1 With tap = 2 With oil cool = 3 Special = 0	1kW = 1 5kW = 2 Special = 0	5W = 1 10W = 2 50W = 3 Special = 0	Yes = 1 Non = 2	Yes = 1 Non = 2	Yes = 1 Non = 2

RED color for special order