

# Multi Mode Fiber Optical Isolator

(850nm, up to 20W)

(patents pending)



DATASHEET

BUY NOW



The OIST Series 850nm Optical Isolator is a passive single stage device that guides lights at 850nm in the normal direction while minimizing back reflection and back scattering in the reverse direction for any state of polarization. With Agiltron's proprietary magnetic-optics technology and proven advanced micro optics design, the isolator features low insertion loss, high isolation, compact structure, high power handling, and high stability. The excellent characteristics of this product make it an ideal choice for application in fiber amplifier systems, pump laser diodes, and optical fiber sensors.

## Features

- Low Insertion Loss
- High Isolation
- Low PDL
- High Stability
- High Reliability
- Cost Effective

## Specifications

Parameter	Min	Typical	Max	Unit
Operation Wavelength	845	850	855	nm
Insertion Loss <sup>[1], [2]</sup>		1.2	1.5	dB
Wavelength Dependent Loss <sup>[1]</sup>			0.2	dB
Isolation <sup>[1], [2]</sup>	20	25	28	dB
Return Loss <sup>[1], [2]</sup>	20	30		dB
Optical Power		0.5	20	W
Storage Temperature	-10		60	°C
Fiber Type	50/125,62.5/125 Multimode			

### Notes:

[1]. Measured using laser with coupled power ratio of categories 5 (CPR). Laser with larger mode fill ratio needs special version. Exclude connectors.

[2]. Our device is designed and optimized for certain laser launch condition which is characterized as CPR value. In general, if application exceeds the specified CPR value, optical performance will become worsen

## Applications

- Optical Fiber Amplifier
- Pump Laser Source
- Fiber Optic Sensor
- Test and Measurement
- Instrumentation

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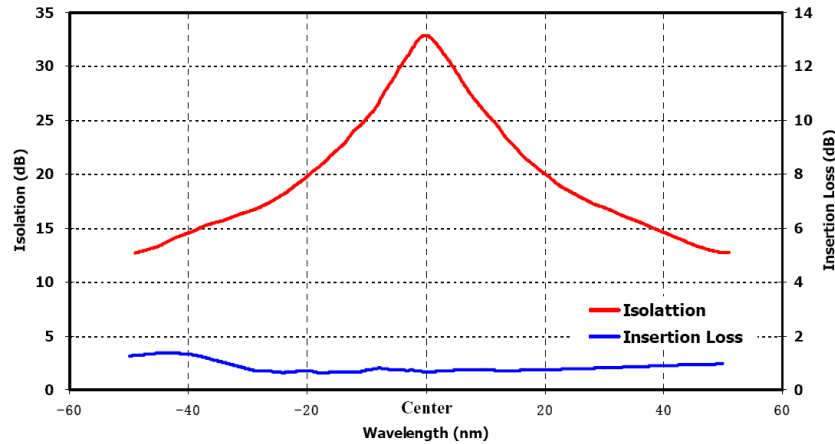
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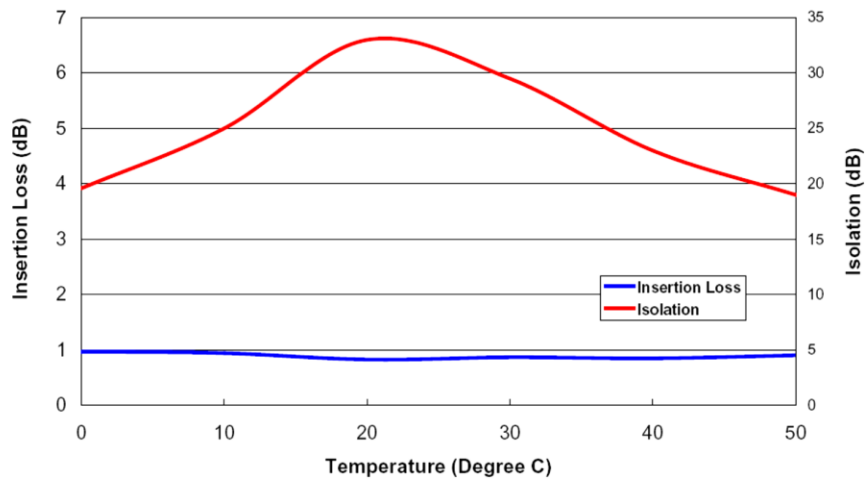


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### Optical Performance



IL/Iso Vs. Temp @ Center Wavelength



### Ordering Information (Part Number)

Prefix	Type	Wavelength	Optical Power	Package	Fiber Type	Fiber Cover	Fiber Length	Connector <sup>[1]</sup>
OIST-	Multimode = 13	850nm = 8	0.5W = 1 5W = 5 10W = 6 15W = 7 20W = 8 Special = 0	Standard = 1 Special = 0	50/125MM = 5 62.5/125MM = 6 Special = 0	Bare Fiber = 1 900um Loose Tube = 3 Special = 0	0.25m = 1 0.5m = 2 1.0m = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 Special = 0

[1]. The connector cannot be installed directly onto bare fiber, as it is prone to damage during shipping. However, the connector can be assembled on bare fiber if a 3 cm protective loose tube is added for reinforcement. The customer can remove this protective tube after testing. The optical power handling of a standard connector is less than 0.5 W for SM28 fiber and +1-774-995-1200 with [sales@agiltron.com](mailto:sales@agiltron.com) [www.agiltron.com](http://www.agiltron.com)