Compact 1064nm High Power Optical Isolator

2W, SM, PM

DATASHEET

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The OIBH series of compact 1064 nm high-power in-line optical isolators offers a small form factor and supports power handling up to 2 W. These isolators use bismuth garnet, which exhibits some absorption in the 1060 nm band and therefore can heat up by approximately 50 °C under 2 W operation in ambient conditions. Standard connectors are not suitable for high-power applications; splicing or using Agiltron high-power connectors is recommended.

Features

- Low Insertion Loss & PDL
- High Isolation Extinction Ratio
- High Stability and Reliability

Applications

- Fiber Laser
- High Power EDFA
- Fiber Optical Instrument

Specifications

Parameter		Min	Typical	Max	Unit
Center Wavelength			1064		nm
Bandwidth			± 5		nm
Peak Isolation			35		dB
Isolation (at 23°C)			≥ 28		dB
Insertion Loss (at 23°C)			≤ 2.5 (Input Power 1W CW) ≤ 3.0 (Input Power 2W CW)		dB
PDL (Non-PM Fiber Isolator)			≤ 20		dB
Polarization Extinction Ratio (PM Fiber Isolator)			≥ 20		dB
Return loss (Input/Output)			≥ 45/45		dB
Power Handling	CW		2		W
	Pulse Peak		10		kW
Fiber Type	Non-PM Fiber Isolator		HI1060		
	PM Fiber Isolator		PM 980		
Operating Temperature		+10		+50	°C
Storage Temperature		0		+60	°C

Rev 07/17/25

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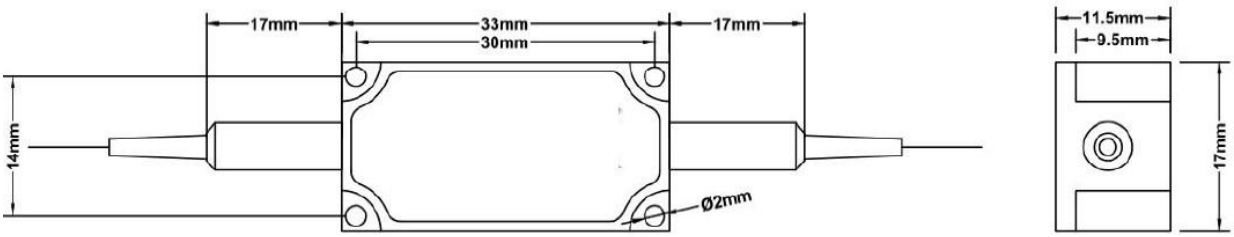
Mechanical Dimensions (mm)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information (Part Number) System

	☐	☐	☐	☐	☐	☐	☐	☐	☐
Prefix	**Type**	**Wavelength**	**Grade**	**Package**	**Forward Power**	**Backward Power**	**Fiber Type**	**Fiber Cover**	**Connector[1]**
OIBH-	P I* = 1 PD** = 2	1064nm = 6 1084nm= 8 1074nm =7 Special = 0	Regular = 1 Special = 0	Regular = 1 Special = 0	1W = 1 2W = 2 Special = 0	0.2W = S Special = 0	Hi1060 = 6 PM980 = 9	Bare Fiber = 1 0.9mm tube = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 High FC/PC = H 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 decreases further with smaller core fibers.

* Polarization Independent

** Polarization Dependent

NOTE: Red color for special order

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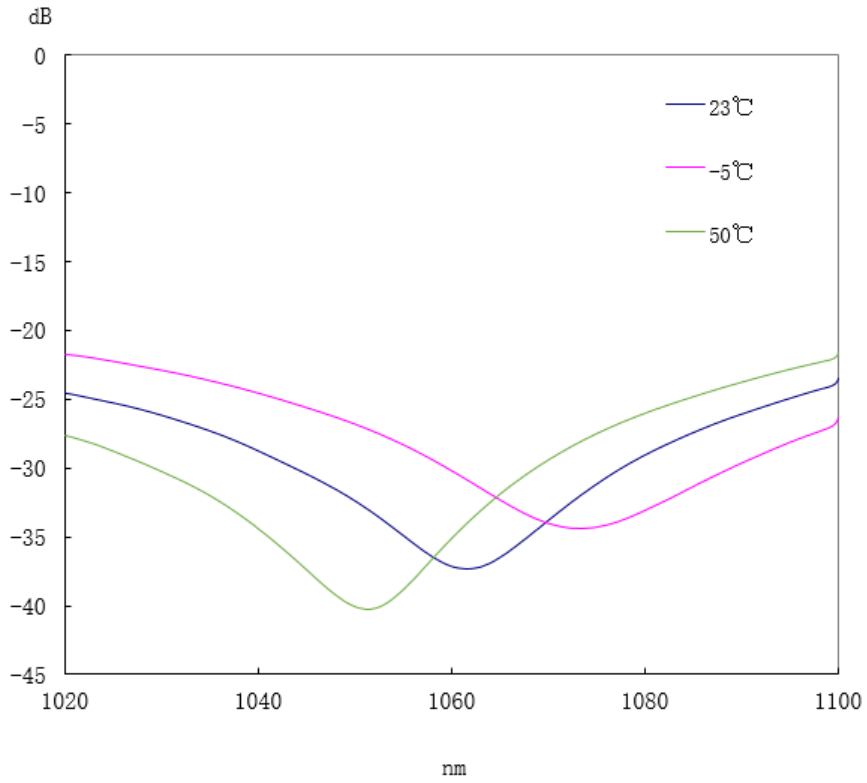
Isolation & IL Spectrum



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