

High Power 2 μm Fiber Optical Isolator

DATASHEET

BUY NOW



This 2 μm passive device transmits high power light from input fiber into output fiber while blocking the unwanted light from back reflection and scattering. Agiltron's proprietary magnetic-optics technology and advanced micro-optic technique enable industrial leading performance in power handling, low loss, reliability, and cost effective. Agiltron currently provides a full range of polarization-independent, polarization maintaining, and custom design versions with a broad wavelength coverage and various output beam diameters. We have experience to incorporate special fibers.

Applications

- Laser Pump Source
- Optical Fiber Amplifier
- Laser Manufacturing
- Laser Marking

Features

- High Power
- High Isolation
- High Reliability
- Low IL, PDL & TDL
- Cost Effective

Specifications

Parameter	Min	Typical	Max	Unit
Center Wavelength	1940, 2000, 2050, 2100			nm
Wavelength Bandwidth		± 50		nm
Insertion Loss ^[1]	Single Stage	≤ 1.2		dB
	Dual Stage	≤ 1.5		
Isolation	Single Stage	≥ 16		dB
	Dual Stage	≥ 35		
Polarization Dependent Loss	Single Stage	≤ 0.15		dB
	Dual Stage	≤ 0.2		
Extinction ratio ^[2]		≥ 18		dB
Return Loss		≥ 50		dB
Power Handling		1, 2, 3, 5, 10		W
Fiber Type	SMF-28e, SM1950, SM2000, PM1550, PM1950, 10/130DCF			
Operating Temperature	0		+65	$^{\circ}\text{C}$
Storage Temperature	-40		+85	$^{\circ}\text{C}$
Dimensions	$\varnothing 5.5 \times 35, 80 \times 12 \times 10$			mm

Notes:

- [1]. Without connectors
 [2]. PM fiber only

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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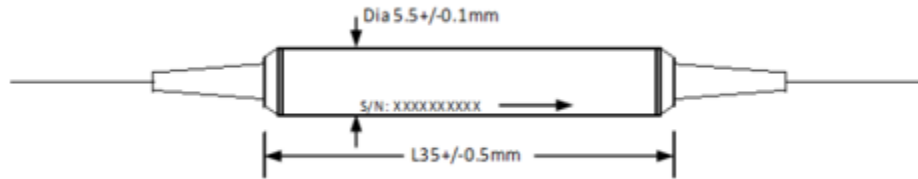
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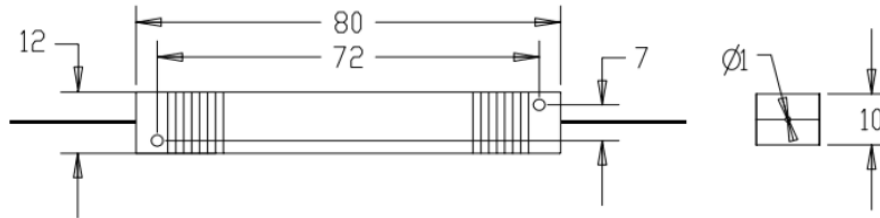
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Mechanical Footprint Dimensions (mm)

For 1~5W



For 6~10W



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

Ordering Information

Prefix	Type	Wavelength	Power Handling	Stage	Fiber Type	Fiber Cover	Fiber Length	Connector
OI2H-	Regular = 11 PM = 12 Special = 00	1940 = 1 2000 = 2 2050 = 3 Special = 0	1W = 1 2W = 2 500mW = 3 5W = 5 10W = 6 Special = 0	Single = 1 Dual = 2 Three = 3	SMF28 = 1 SM1950 = 9 PM1950 = 8 PM 1550 = 5 10/130DCF = 7 Special = 0	Bare fiber = 1 900um tube = 3 Armor cable = 5 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

NOTE:

The regular connector can only handle 0,5W. We make high-power connector (\$390 ea)