

Compact Fiber to Free Space Isolator/Collimator (1W CW)

(patents pending)

Product Description

The OI Series Optical Fiber to Free Space Isolator/Collimator is a passive device that guides lights near 1060 nm in the normal direction while minimizing back reflection and back scattering in the reverse direction for any state of polarization. At the same time, it collimates the output beam to a desired beam size. With Agiltron's proprietary magneto-optics technology and proven advanced micro optics design, it 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 laser. We currently offer a full range of polarization independent, polarization maintain, and multimode versions. Agiltron also provides customized design to meet special applications.

Performance Specifications

OI Series BIG based PI Isolator	Min	Typical	Max	Unit
Operation Wavelength	1050	1060	1200	nm
Insertion Loss ^{****}		1.1		dB
Wavelength Dependent Loss			0.2	dB
Isolation ^{*****}		35		
Polarization Dependent Loss		0.1	0.2	dB
Polarization extinction ratio		22 ^{**}		
Polarization Mode Dispersion			0.2	ps
Return Loss ^{*****}		50 ^{***}		dB
Optical Power Handling			2 ^{****}	W (CW)
Collimated Beam size	250		1000	μm
Fiber Type	Hi1060, PM, customer			
Package Dimension	(φ)22x(L)60			mm

* At peak wavelength

** For PM and PZ device

*** Using Hi1060 fiber. LMA and DC fiber may vary.

**** Continuous operation, for pulse operation call.

***** 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.

Features

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

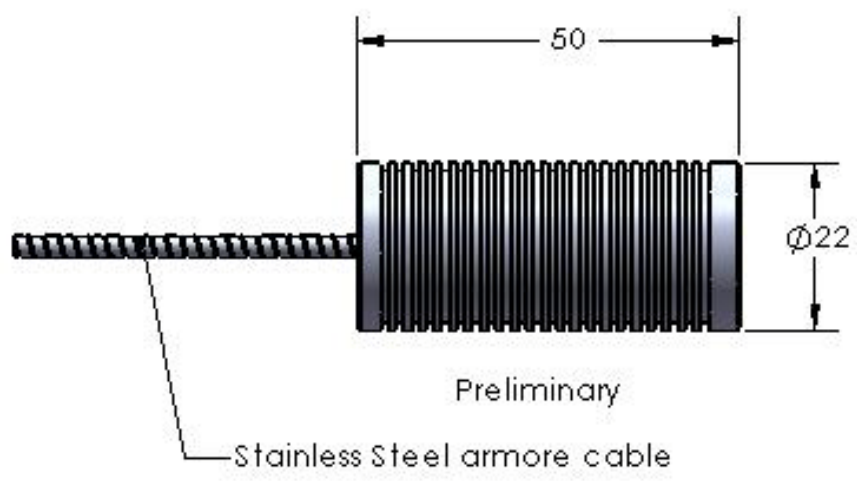
Applications

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

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Mechanical Dimensions (Unit:mm)



Ordering Information

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	Type	Wavelength	Power	Package	Fiber Type		Fiber Length	Connector	
	Polarization Independent=11 Polarization Maintaining=12 Polarizing=14 Multimode=13 Special=10	1060=1 Special=0	1W=1 Special=0	Standard=1 Special=0	HI1060=2 HI1060 Flex=3 PM980=4 50/125=5 62.5/125=6 Special=0	Bare fiber=1 900um tube=3 Special=0	0.25M=1 0.5M=2 1.0M=3 Special=0		

* Agiltron provide high power connector, please call.