



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 magnetic-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

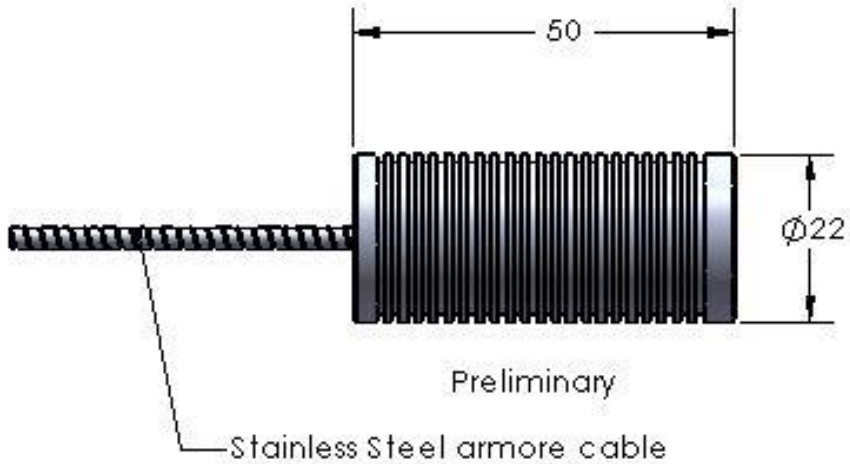
Applications

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

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Mechanical Dimensions (Unit:mm)



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

Ordering Information

| OIFC- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1* |
|---|--------------------------|--------------------------|--------------------------|---|---|--|--------------------------|--------------------------|----|
| 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.

Warning: An Optical Collimator need to have a working distance stated by the customer at the time of order