

High Power Fiber Collimator With Isolator

(patents pending)

Product Description

This passive device transmits high power light from input fiber into a collimated output light beam into free space 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.

Features

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

Performance Specifications

FSOI High power Isolator	Min	Typical	Max	Unit
Operation Wavelength		1060/2000		nm
Insertion Loss ^[1]		0.6	0.8	dB
Isolation	22	25		dB
Polarization Dependent Loss		0.1	0.2	dB
Polarization Mode Dispersion		0.1	0.2	ps
Return Loss	40	50		dB
Optical Power Handling ^{[2][4]}			50	W
Beam Size ^[3]	0.4	1		mm
Fiber Type	See Order Information			
Storage temperature	-10 to 60			°C
Storage Humidity	5% to 95% (No Condensation)			
Package Dimension ^[5]	See design			

Note:

- [1] Measured without connectors
- [2] Continuous operation. For pulse operation, please call us.
- [3] For beam size larger than 1 mm, please call us.
- [4] Back Reflect < 10%. For >10% application, please call us.
- [5] For beam larger than 1mm, the package could be larger. Please call us

Applications

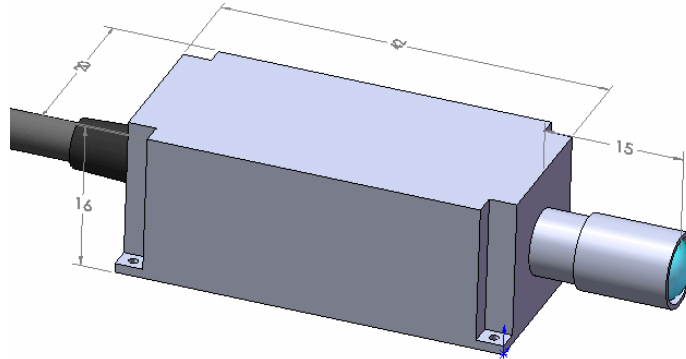
- Laser Pump Source
- Optical Fiber Amplifier
- Laser Manufacturing
- laser Marking

High Power Fiber Collimator With Isolator

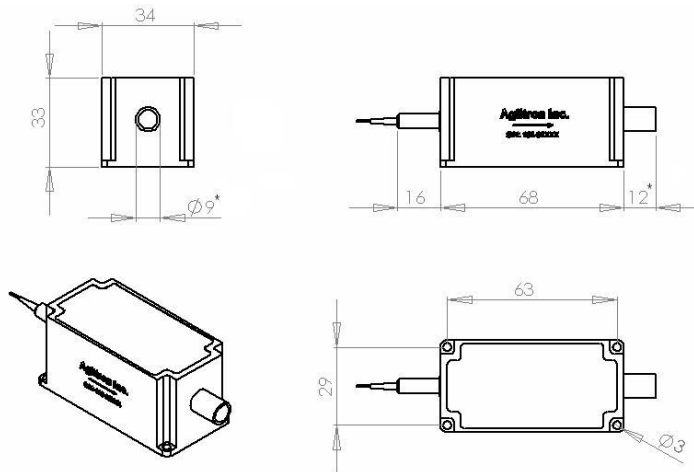
(patents pending)

Mechanical Footprint Dimensions (mm)

2000 nm isolator



1060 nm isolator



*Note: the dimension of the optical head may vary with the beam size and fiber type.

Ordering Information

FSOI -	Type	Wavelength	Power handling	Beam size	Fiber Type	Fiber Length	Connector	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	PI=11 PM=12 Special=00	1060=1 2000=2 Special=0	10W=1 20W=2 30W=3 50W=5	0.4mm=1 1.0mm=2 Special=0 (@1/e ²)	SMF28=2 PM 1550=3 SM1950=4 SM2000=5 PM1950=6 Hi1060=1 PM980=9 Special=0	Bare fiber=1 900um loose tube=2 Armor cable (3 mm)=3 Armor cable (5 mm)=5 Special=0	0.25M=1 0.5M=2 1.0 M=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0

15 Presidential Way , Woburn, MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040