

High Power Fiber Collimator With Isolator (Up to 50W CW) (patents pending)

Product Description

The FSOI Series TGG-based high power isolator is a passive device that transmits high power light from input fiber into an output collimated 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 package technique enable industrial leading performance. 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	1054	1064	1074	nm
Insertion Loss		0.6	0.8	dB
Isolation	22	27		dB
Polarization Dependent Loss		0.1	0.2	dB
Polarization Mode Dispersion		0.1	0.2	ps
Return Loss	45	50		dB
Optical Power Handling**			50	W
Beam Size	0.6		1	mm
Fiber Type	See Order Information			
Loss Stability		0.2 (15W/CW)		dB
Storage temperature		-10 to 60		°C
Storage Humidity		5% to 95% (No Condensation)		
Pointing	1deg. Horiz. and Vertical from standard plane			
Package Dimension (Body)		Ø32x70		mm

Note:

* Measured without connectors

** Continuous operation, for pulse operation call

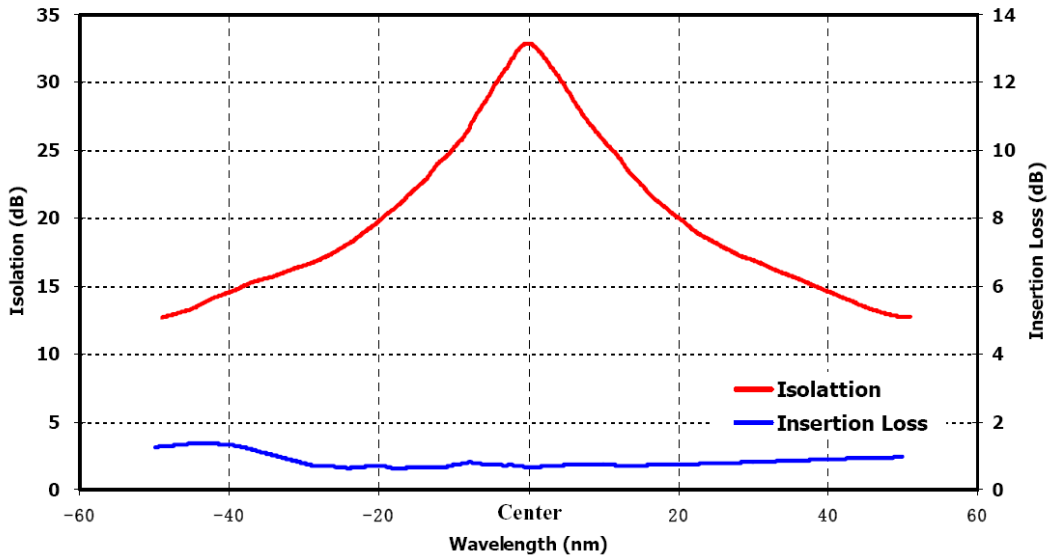
Applications

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

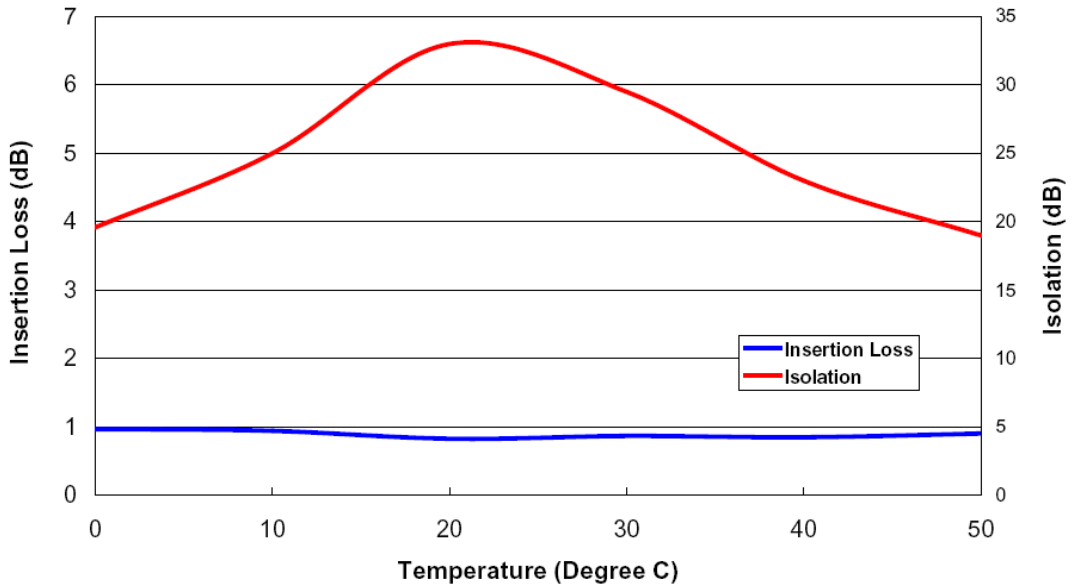
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Optical Performance



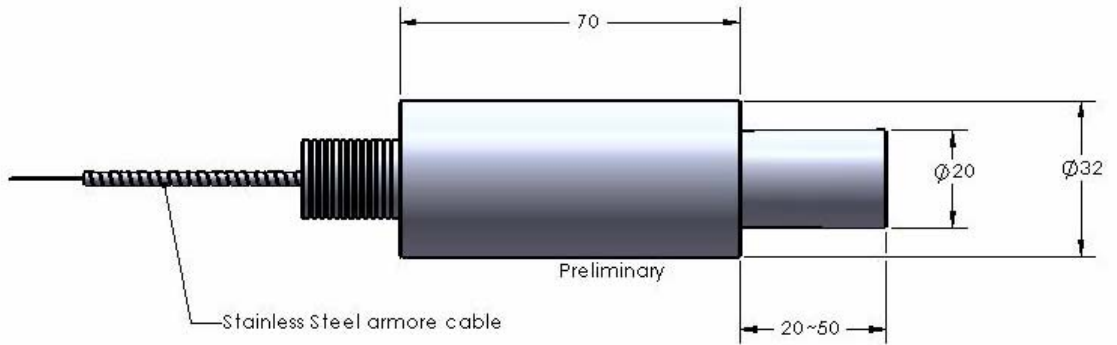
IL/Iso Vs. Temp @ Center Wavelength



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Mechanical Footprint Dimensions (mm)



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"/>	Regular=11 PM=12 Special=00	1064=1 Special=0	10W=1 20W=2 30W=3 50W=5	0.6mm=1 1.0mm=2 Special=0 (@1/e ²)	HI1060=2 HI780=7 HI980=9 Special=0	Bare fiber=1 900um loose tube=3 Armor cable=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