

# Terbium Gallium Garnet Based Polarization Independent 850/980/1060 Optical Isolator

(patents pending)

## Product Description

The OI Series TGG based 850/980/1060 nm optical Isolator is a passive device that guides lights at 850/980/1060 nm in the normal direction while minimizing back reflection and back scattering in the reverse direction for any state of polarization. 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 amplifier systems, pump laser diodes, and optical fiber sensors. We currently offer a full range of polarization independent, polarization maintain, and multimode versions. Agiltron also provides customized design to meet special applications.



## Features

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

## Performance Specifications

OI Series TGG based PI Isolator		Min	Typical	Max	Unit
Operation Wavelength	850	840		860	nm
	980	970		990	
	1060	1050		1070	
Insertion Loss <sup>1</sup>			0.8	1.2	dB
Wavelength Dependent Loss				0.2	dB
Isolation	850	22	27		dB
	980/1060	25	30		
Polarization Dependent Loss			0.1	0.2	dB
Polarization Mode Dispersion				0.2	ps
Return Loss			50		dB
Optical Power Handling				300	mW
Storage Temperature			-10		60 °C
Fiber Type			See order information		
Package Dimension	Standard 850	(L)61x(W)34x(H)33			mm
	Standard 980/1060	(L)83x(W)34x(H)33			
	Mini Size 980/1060	(L)61x(W)34x(H)33			

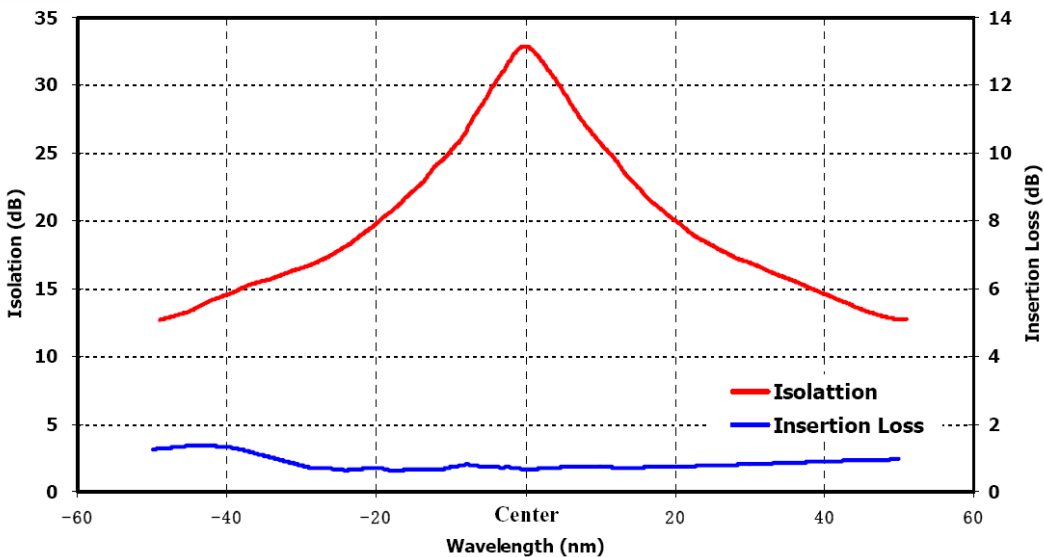
1. Excluding connectors

## Applications

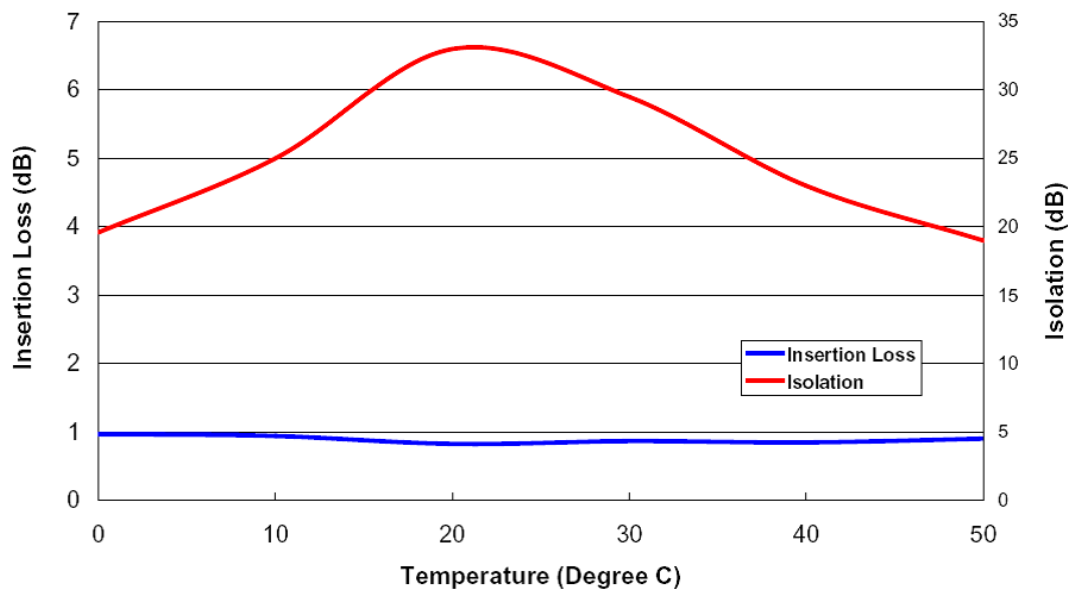
- Optical Fiber Amplifier
- Pump Laser Source
- Fiber Optic Sensor
- Test and Measurement
- Instrumentation

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## Optical Performance

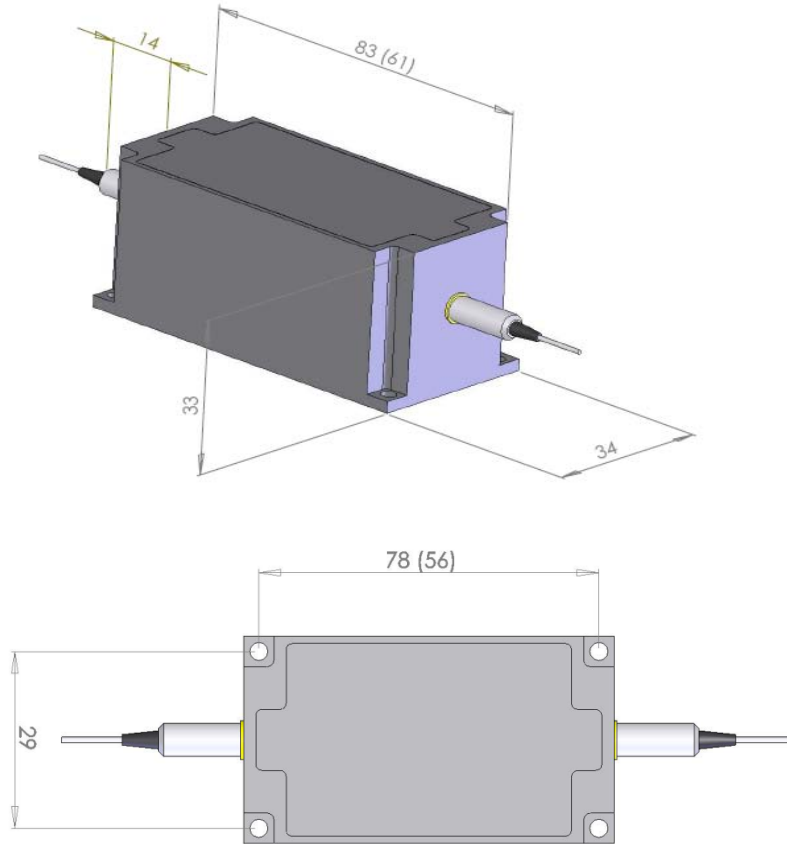


IL/Iso Vs. Temp @ Center Wavelength



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**Mechanical Dimensions: Standard (Mini/850) Unit: mm**



## Ordering Information

OIST-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Grade	Package	Fiber Type	Fiber Length	Connector	
	Polarization Independent=11 Special=10	1060=1 850=8 980=9 Special=0	Standard=1 Special=0	Standard=1 Mini Size (980/1060) =2 Special=0	HI1060=2 HI780=7 HI980=9 Special=0	Bare fiber=1 900um Loose tube=3 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=7 Special=0