

Broadband Fiber Optical Isolator

1150nm to 2400nm, >100nm broadband



DATASHEET



We produce a variety of broadband optical isolators covering a broad wavelength range of 1000nm to 2450nm. These isolators are polarization-independent, having a flat >23dB isolation as indicated in the graph below. We offer three wavelength bands centered at 1310nm, 1550nm, and 2000nm. With Agiltron's proprietary configuration, these isolators feature extremely low polarization mode dispersion (PMD) in addition of low insertion loss, high isolation, compact structure, and high stability. A built-in output tap monitor is an option. This unique performance attribute makes it an ideal choice for very broadband SLD sources widely used in OCT and other optical fiber sensing systems. Agiltron has a volume isolator production operation for making custom-specific designs with specially-designed testing tools. Agiltron also provides customized designs to meet special applications or cost requirements. Wavelength and range not listed can be specially ordered.

Features

- Flat Iso
- Fixed or Tunable Wavelength
- Low Loss
- High Reliability
- KW Optical Power Handling
- Polarization Dependent Input

Applications

- Laser System
- Lab Use
- Instruments

Specifications

Parameter	Min	Typical	Max	Unit	
Center Wavelength	1150		2400	nm	
Wavelength Range (\pm center)	100	150	170	nm	
Insertion Loss ^[1]	0.5	0.6	0.8	dB	
Return Loss	50			dB	
Isolation	Single stage	25	30	38	dB
	Dual stage	46	50	60	dB
Polarization Dependent Loss			0.25	dB	
Forward Optical Power ^[2]		500	10	W	
Backward Optical Power ^[3]			100	mW	
Tuning Wavelength Rang	60		100	nm	
Operating Temperature	-5		70	°C	
Storage Temperature	-40		85	°C	
Mounting Adaptor	Available				

[1] For a single stage, the dual stage has a 25% higher loss. For 1550nm, other wavelengths may have a higher loss. Without a connector, each connector adds 0.25dB

[2] 500mw is the standard version for 1550nm, higher power is high power version

[3] only list standard power handling version. High power special order

Broadband Fiber Optical Isolator

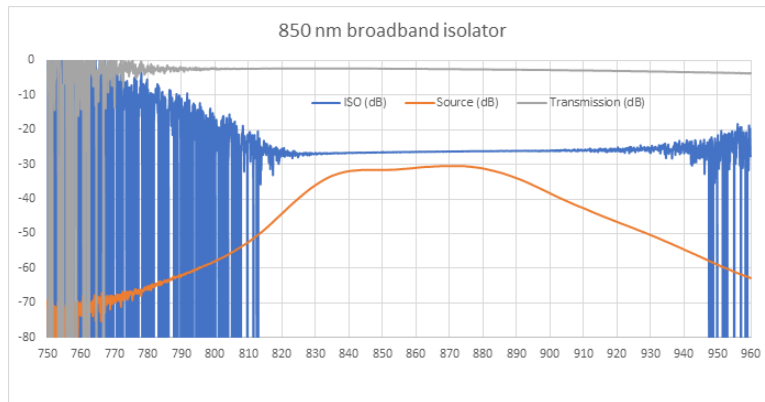
1150nm to 2400nm, >100nm broadband



DATASHEET

Mechanical Dimensions (mm)

Optical Performance (typical single stage)



Ordering Information

Prefix	Type	Wavelength	Grade	Package	Forward Power	Backward Power	Fiber Type	Fiber Cover	Connector
OIST-		1060nm = 1 850nm= 8 1030nm = 3 980nm= 9 780nm=7 660nm=6 Special = 0	Regular=1 Low PMD=2	Regular=1 With tap=2 Special=0	1W=1 2W=2 5W=5 100W=A 500W=B 800W=C Special=0	200mW=1 500mW=2 1W=3 Special=0	HI1060 = 2 HI980 = 9 HI780=7 MM50/125=5 Special = 0	Bare fiber=1 0.9mm tube=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0

Red color for special order