

2 Micron Fiber Isolator

Polarization Insensitive: AP-ISO-2000PI
 Polarization Maintaining: AP-ISO-2000PM

An isolator is typically used to block light traveling in the backward direction, preventing instability and damage to a laser system caused by back reflection.

Features:

- Mid-IR wavelength region
- Low insertion loss
- High isolation
- Excellent stability and reliability
- Small package

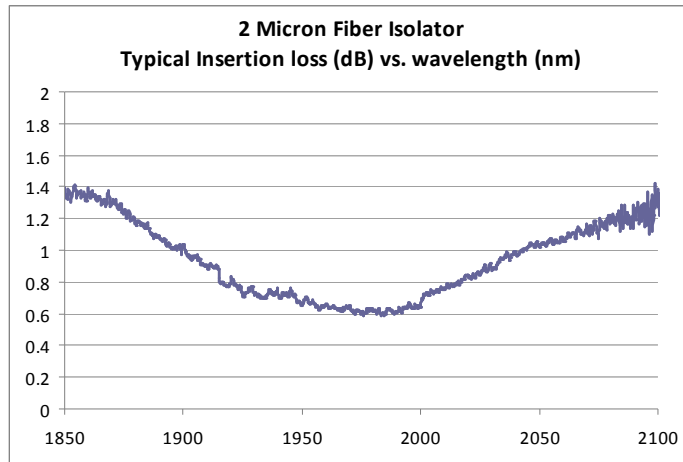


Product Characteristics:

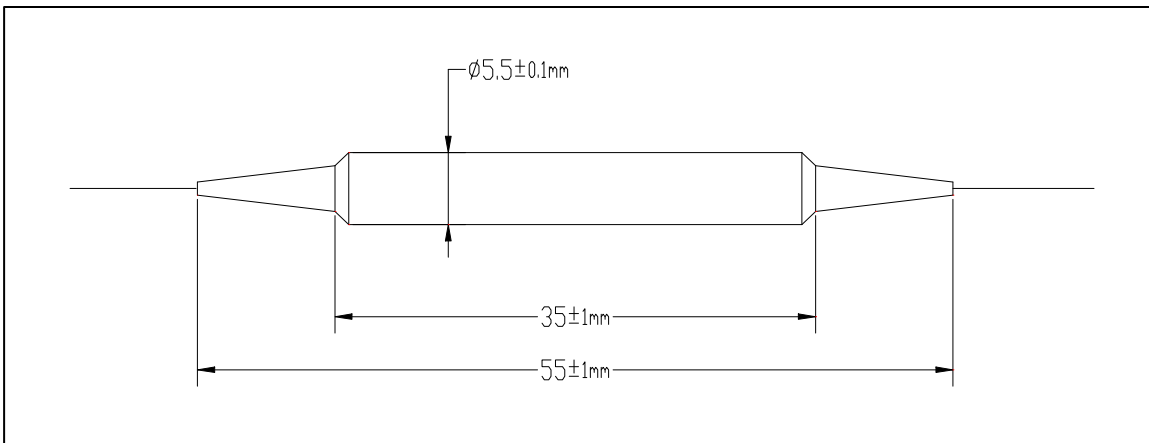
Parameters	Unit	Specification	
		AP-ISO-2000PI	AP-ISO-2000PM
Operating Wavelength	nm	1980	1980
Max. Average Power	W	1, 2	1, 2
Max. Peak Power (pulsed version)	kW	10	10
Min. Isolation (dual stage, at 25°C)	dB	35 (at ±50 nm)	35 (at ±50 nm)
Max. Insertion Loss (dual stage, -5°C to 70°C)	dB	1.5 (at ±20 nm)	1.5 (at ±20 nm)
Min. Return Loss (Input/Output)	dB	50	50
Max. Polarization Dependent Loss	dB	0.2	N/A
Max. Polarization Mode Dispersion	ps	0.3	N/A
Min. Polarization Extinction Ratio	dB	N/A	18
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	
Max. Tensile Load	N	5	
Package Dimensions	mm	Φ5.5 x 35 (55 fiber to fiber)	
Fiber Pigtail		SMF-28e Fiber 900μm Loose Tube Jacket Fiber Length 1.0 m	Panda PM 1550 Fiber 900μm Loose Tube Jacket Fiber Length 1.0 m

Note: Above specifications are for device without connectors. For device with connectors, Insertion Loss is 0.3 dB higher and Return Loss is 5 dB lower for each connector.

Typical Insertion Loss Spectrum:



Mechanical Outline:



Ordering Information:

2 Micron Polarization Insensitive Fiber Isolator

AP-ISO-2000PI	-	2	-	xx	-	L	-	1	-	N	-	x
		No. of stages: 2 = dual stage		Max. power 01 = 1W 02 = 2W		Fiber pigtail: L = 900µm loose tube		Fiber length: 1 = 1m		Connector: N = no connector		Operation Mode: C = CW P = Pulsed

2 Micron Polarization Maintaining Fiber Isolator

AP-ISO-2000PM	-	2	-	xx	-	L	-	1	-	N	-	x
		No. of stages: 2 = dual stage		Max. power 01 = 1W 02 = 2W		Fiber pigtail: L = 900µm loose tube		Fiber length: 1 = 1m		Connector: N = no connector		Operation Mode: C = CW P = Pulsed

2 Micron Fiber Isolator-Collimator

Polarization Insensitive: AP-ISO-2000PI-COLL

Polarization Maintaining: AP-ISO-2000PM-COLL

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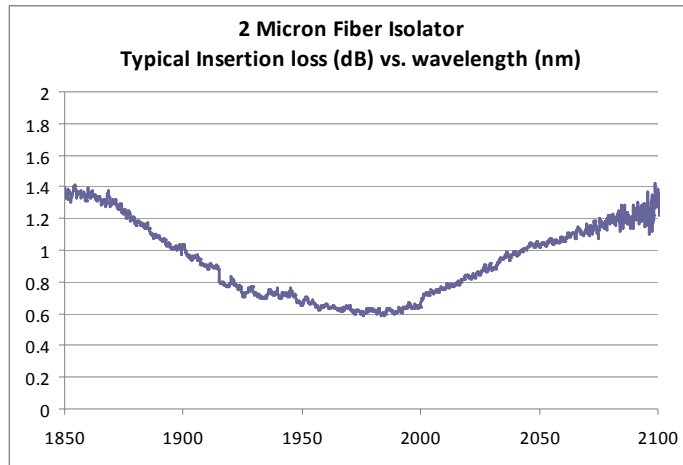
Features:

- Mid-IR wavelength region
- Low insertion loss
- High isolation
- Excellent stability and reliability

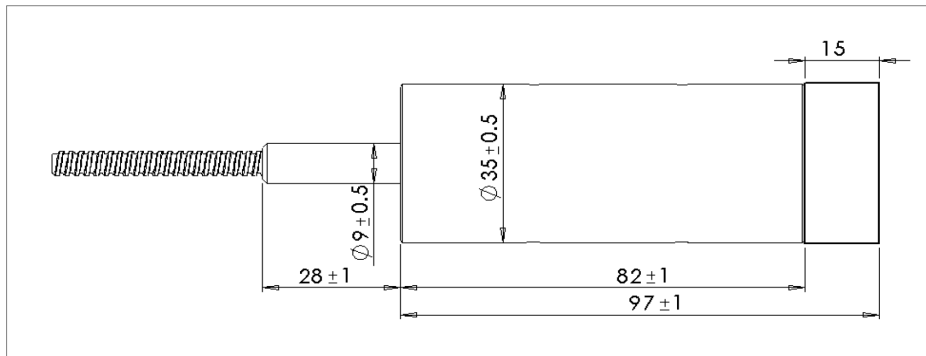
Product Characteristics:

Parameters	Unit	Specification	
		AP-ISO-2000PI-COLL	AP- ISO-2000PM-COLL
Operating Wavelength	nm	1980	1980
Max. Average Power Handling	W	5	5
Max. Peak Power Handling (for ns pulses)	kW	10	10
Min. Isolation at 25°C (dual stage)	dB	35 (at ±50 nm)	35 (at ±50 nm)
Max. Insertion Loss (dual stage)	dB	0.5 (at ±50 nm)	0.5 (at ±50 nm)
Min. Return Loss (Input/Output)	dB	45	45
Min. Polarization Extinction Ratio	dB	N/A	20
Collimator Output Beam Diameter	mm	~ 5	
Operating Temperature	°C	10 to 60	
Input Fiber and Cable Type		SMF-28e fiber 900 µm loose tube jacket 5 mm dia. armored cable Fiber Length 1.0 m	Panda PM 1550 fiber 000 µm loose tube jacket 5 mm dia. armored cable Fiber Length 1.0 m
Output Collimator Housing Dimensions	mm	Φ35 x 97	

Typical Insertion Loss Spectrum:



Mechanical Outline:



Ordering Information:

2 Micron Polarization Insensitive Fiber Isolator

AP-ISO-2000PI-COLL	-	2	-	05	-	L	-	1	-	C
		No. of stages: 2 = dual stage		Max. power 05 = 5W		Fiber type: L = loose tube fiber in armored cable		Fiber length: 1 = 1m		Connector: C = collimator

2 Micron Polarization Maintaining Fiber Isolator

AP-ISO-2000PM-COLL	-	2	-	05	-	L	-	1	-	C
		No. of stages: 2 = dual stage		Max. power 05 = 5W		Fiber type: L = loose tube fiber in armored cable		Fiber length: 1 = 1m		Connector: C = collimator