

1550nm Polarization-Maintaining Dual-Stage Fiber Isolator Mini



● Product Description

IdealPhotonics' optical isolator products maintain excellent back-reflection isolation performance under any polarization state. They feature low insertion loss, high isolation, high return loss, low polarization-dependent loss (PDL), low polarization mode dispersion (PMD), a wide operating wavelength and temperature range, and an epoxy-free optical path. These characteristics make them a cost-effective solution for communication networks. This series of products is suitable for erbium-doped amplifiers, wavelength division multiplexing (WDM) systems, fiber optic equipment, and lasers.

● Part Number

NIR-ISO-W1550-S22-P2-1-9-PA

● Product features

Wide operating wavelength range & wide operating temperature range、 Low insertion loss & high isolation、 Low polarization-dependent loss and

polarization mode dispersion、 Epoxy-free optical path、 Extremely high reliability and stability

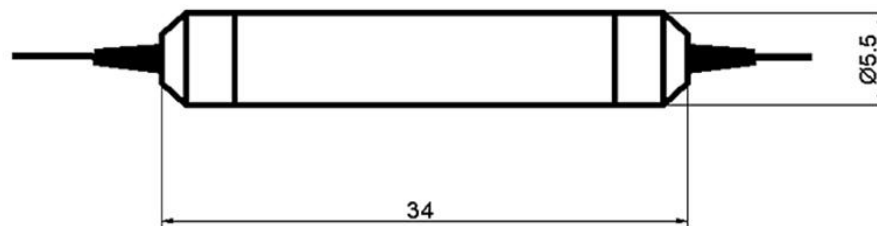
● Application area

Fiber amplifiers、 WDM & DWDM systems、 Fiber optic equipment、 Fiber lasers

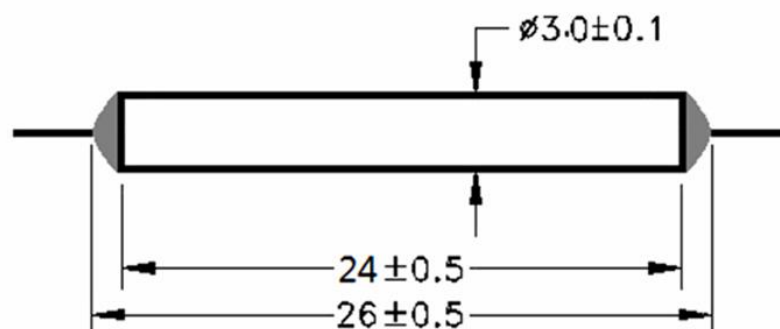
Parameters

Dimensional Drawing

Standard Size Fiber Isolator



Mini Fiber Isolator



Technical Specifications

Parameters	Unit	Value	Notes
Center Wavelength (nm)	nm	1550 or 1310	1030/1053/1064/etc. (Wavelength customizable)
Insertion Loss	dB	≤0.6	1550nm,30mw,DFB
Isolation	dB	≥28 dB Single-Stage ≥46 dB Dual-Stage	@25°C
Isolation	dB	≥20	Full Temperature Range: -40 to +75°C
Polarization-Dependent Loss	dB	≤0.1dB	
Fiber Type	N/A	SMF-28E+/PM1550, etc. (Single mode or polarization maintaining)	1030/1053/1064nm optional Hi1060 (Other fiber types available)
Polarization Mode Dispersion	Ps	<0.25	
Polarization Dispersion	Ps	<0.05	
Return Loss (Input/Output)	dB	>60/55dB	
Maximum Operating Power	mW	500	
Operating Temperature	°C	-5-70°C	
Storage Temperature	°C	-40-85°C	
Test Light Source		1550nm Benchtop Light Source / 1060nm DFB	
Package Dimensions (mm)		As shown in the figure below	

Notes:

*. All specifications exclude connectors and are valid only at the specified wavelength, polarization state, and temperature above.

**. Specifications are subject to change without prior notice.

Ordering info

NIR-ISO-W□□□□-S○-P▽-☆-△-XX

W□□□□: Wavelength

0980: 980nm

0850: 850nm

1064: 1064nm

1310: 1310nm

1550: 1550nm

So: Stage Numbers

11: Single-Stage Isolator

22: Dual-Stage Isolator

P▽: Package

1: Standard

2: Mini

☆: Pigtail Length

05: 0.5m

1: 1m

10: 10m

△: Loose Tube

B: Bare Fiber

9: 900µm Loose Tube

20: 2mm Loose Tube

30: 2mm Loose Tube

XX: Fiber and Connector Type

SA = SMF-28E+ FC/APC

SP = SMF-28E+ FC/PC

SN = Bare Fiber, No Connector

PA = PM Fiber + FC/APC

PP = PM Fiber + FC/PC.