

# 1550nm Polarization-Maintaining Single-Stage Fiber Isolator PM1550 FC/APC



## ● 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-S11-P1-1-9-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

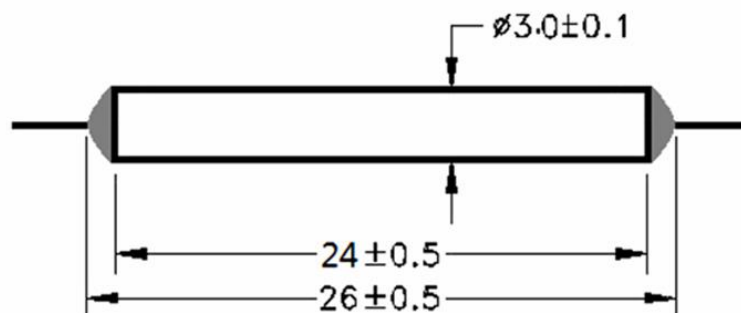
## Parameters

### 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	@25°C
		≥46 dB Dual-Stage	
Isolation	dB	≥20	
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



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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.