

# 980/1550nm WDM/ISOLATOR HYBRID COMBINATION

## WDIH 1598 Series

### Product Description

Oplink's WDIH is a combination of a 980/1550nm filter and a 1550nm polarization insensitive optical isolator. The WDIH is a low cost model with excellent performance including low insertion loss, high isolation, high return loss, low polarization dependent loss (PDL), and low polarization mode dispersion (PMD). This product offers integrated solutions to EDFA applications by combining more functions into a very compact package.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



### Performance Specification

WDIH1598 Series		Single Stage	Dual Stage	Unit
Operating Wavelength Range	Signal Channel	C band : 1528 ~ 1564 L band : 1570 ~ 1605		nm
	Pump Channel	965 ~ 995		
Insertion Loss <sup>[1]</sup>	Signal Channel	< 1.2	< 1.3	dB
	Pump Channel	< 0.6		
Wavelength Isolation	Signal Channel	> 30		dB
	Pump Channel	> 12		
Reverse Direction Insertion (Over signa wavelength range and 0~70°C, all SOP)	Signal Channel	> 21	> 36	dB
TDL		< 0.25	< 0.3	
WDL		< 0.4	< 0.5	
Polarization Dependent Loss		< 0.10	< 0.20	dB
Polarization Mode Dispersion (standard)		< 0.25	< 0.05	dB
Return Loss		≥ 50		dB
Directivity		≥ 55		dB
Operating Power Handling		≤ 500		mW
Operating Temperature		0 to +70		°C
Storage Temperature		-40 to +85		°C
Fiber Type	Signal Port	Corning SMF-28		
	COM/Pump Ports	Corning HI1060		
Package Dimension <sup>[3]</sup>		P1 : (Ø) 5.5 x (L) 34.0		mm
		P2 : (Ø) 5.5 x (L) 40.0		

### Features

- ◆ Wide Operating Wavelength Range
- ◆ Low Insertion Loss
- ◆ High Isolation
- ◆ Ultra Low PDL & PMD
- ◆ High Stability & Reliability
- ◆ Epoxy-free Optical Path

### Applications

- ◆ Fiberoptic Amplifiers
- ◆ CATV Fiberoptic Links
- ◆ WDM Systems
- ◆ Fiberoptic Instruments
- ◆ Transmitters and Fiber Lasers
- ◆ Laboratory R&D

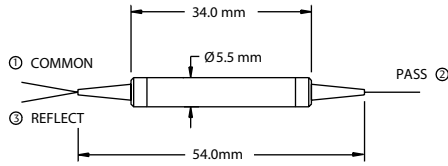
<sup>[1]</sup> The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified.

<sup>[2]</sup> All the parameters are excluding connectors.

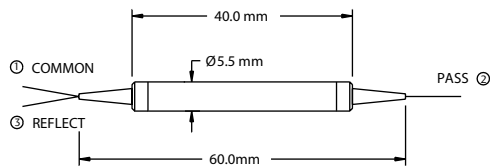
<sup>[3]</sup> The mechanical tolerance should be +/-0.2mm on all package dimensions unless otherwise custom specified.

**Mechanical Drawing / Package Dimensions (dimension in mm)**

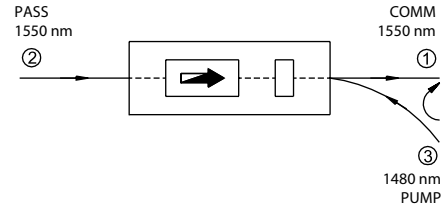
P1: SMF-28 250µm bare fiber



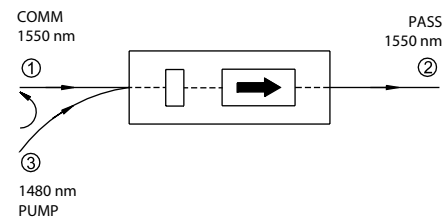
P2: 900µm loose tube



TYPE F

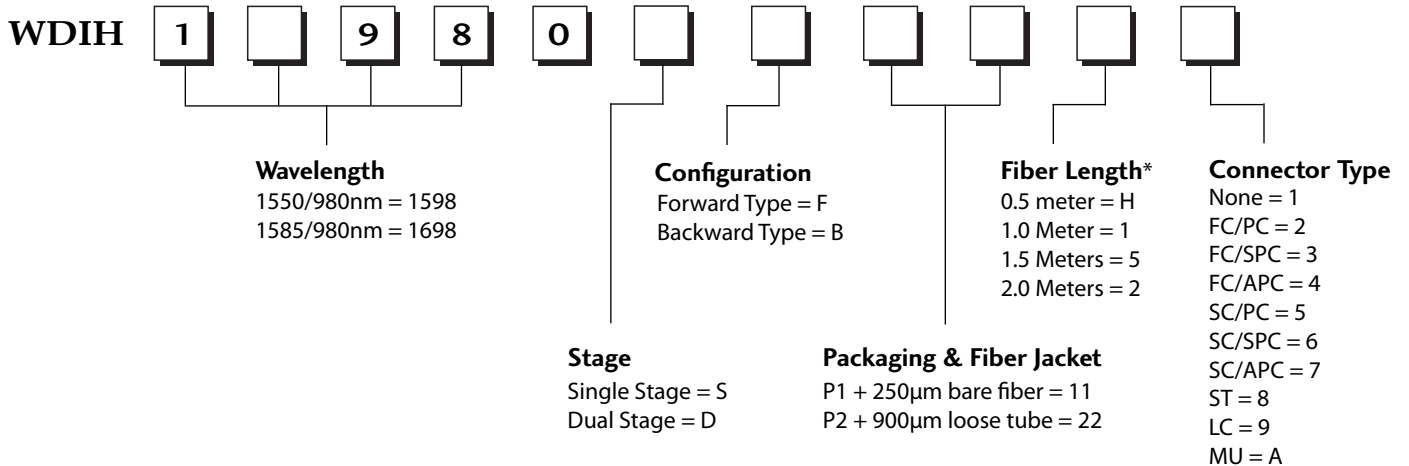


TYPE B



**Ordering Information**

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



\* The tolerance of fiber length is +/-0.1m. 1 meter is standard.  
The lead-time for special fiber length will be longer.