

BAND PASS FILTER/ISOLATOR HYBRID COMBINATION

BFIH Series

Product Description

Oplink's BFIH is a compact combination of a bandpass filter and a polarization insensitive optical isolator. The built-in bandpass filter blocks the amplifiers spontaneous emission (ASE) in the erbium doped fiber amplifier (EDFA), thus significantly improving the amplifier's performance.



Performance Specification

BFIH Series		Type A		Type B		Unit
Isolator Stage		Single Stage	Dual Stage	Single Stage	Dual Stage	
Operating Wavelength Range	Pass Channel	1528~1563		1547.5~1563.5		nm
	Rejection Channel	1450~1495		1450~1540		dB
Pass Channel Insertion Loss ^[1]		< 0.8	< 1.0	< 0.9	< 1.1	dB
Rejection Channel Insertion Loss		> 30		> 25		dB
Reverse Direction Isolation (over pass channel wavelength range 0~70°C, all SOP)		> 21	> 36	> 21	> 36	dB
Wavelength Dependent Loss		< 0.3	< 0.4	< 0.3	< 0.4	dB
Polarization Dependent Loss		< 0.15	< 0.2	< 0.15	< 0.2	dB
Polarization Mode Dispersion		< 0.25	< 0.05	< 0.25	< 0.05	dB
Return Loss		> 55				
Maximum Power Handling		< 500				mW
Fiber Type		Corning SFM-28				
Operating Temperature		0 to +70				°C
Storage Temperature		-40 to +85				°C
Package Dimensions ^[3]		P1: (ø) 5.5 x (L) 34.0				mm

Note:

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

[2] All the parameters are excluding connectors

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

Features

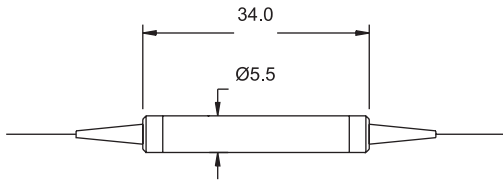
- ◆ Wide Operating Wavelength Range
- ◆ Compact Size
- ◆ High Isolation
- ◆ Ultra Low PDL & PMD
- ◆ Highly Stable & Reliable
- ◆ Epoxy-free Optical Path

Applications

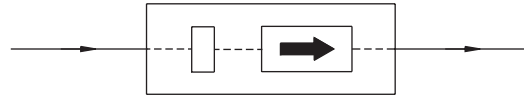
- ◆ Fiberoptic Amplifiers
- ◆ CATV Fiberoptic Links
- ◆ WDM Systems
- ◆ Fiberoptic Instruments
- ◆ Transmitters and Fiber Laser Sensors
- ◆ Laboratory R&D

Mechanical Drawing and Configuration (dimension in mm)

P1 Package Dimension



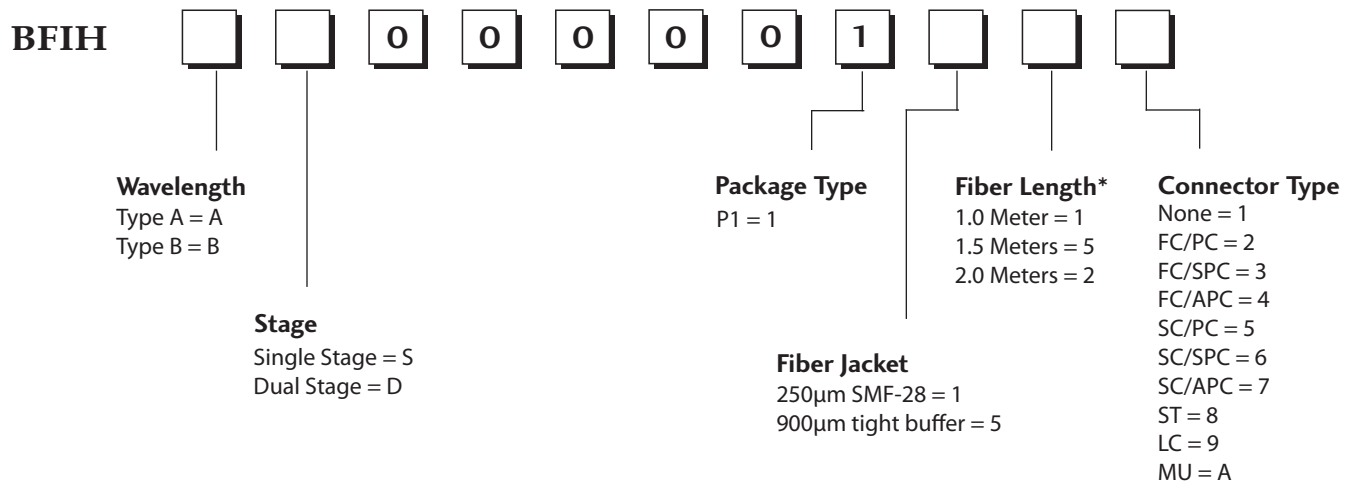
Configuration



Unit: mm

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.