

# MINI 1480/1550nm WDM/ISOLATOR HYBRID

## Mini WDIH54 Series

### Product Description

Oplink's WDIH is a combination of a 1480/1550(1585)nm filter and a 1550(1585)nm polarization insensitive optical isolator. The Mini WDIH is a low cost model with excellent performance including low insertion loss, high isolation, high return loss, and low polarization dependent loss (PDL). This product offers integrated solutions to EDFA applications by combining more functions into a very compact package. The product package dimension is about 3.0×30mm.

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

| Mini WDIH54 Series                                         |                     |              | Min                        | Typical | Max | Unit |
|------------------------------------------------------------|---------------------|--------------|----------------------------|---------|-----|------|
| Operating Wavelength Range (λs)                            |                     |              | 1528 ~ 1564 or 1570 ~ 1604 |         |     | nm   |
| Pump Channel Wavelength Range (λp)                         |                     |              | 1465 ~1495                 |         |     | nm   |
| Channel Isolation (over λs, 0~70°C, all SOP)               |                     | Single Stage | 21                         |         |     | dB   |
|                                                            |                     | Dual Stage   | 36                         |         |     |      |
| Isolation                                                  | Pump Channel @ λs   |              | 15                         |         |     | dB   |
|                                                            | Signal Channel @ λp |              | 25                         |         |     |      |
| Insertion Loss (Over wavelength range and 0~70°C, all SOP) | Pump Channel        |              | 0.5                        |         |     | dB   |
|                                                            | Signal Channel      | Single Stage | 0.7                        |         |     |      |
|                                                            |                     | Dual Stage   | 0.9                        |         |     |      |
| WDL                                                        |                     |              | 0.25                       |         |     | dB   |
| Return Loss                                                |                     |              | ≥ 55                       |         |     | dB   |
| Polarization Dependent Loss (PDL)                          |                     | Single Stage | 0.10                       |         |     | dB   |
|                                                            |                     | Dual Stage   | 0.15                       |         |     |      |
| Polarization Mode Dispersion (PMD)                         |                     | Single Stage | 0.25                       |         |     | ps   |
|                                                            |                     | Dual Stage   | 0.05                       |         |     |      |
| Directivity                                                |                     |              | ≥ 55                       |         |     | dB   |
| Operting Power Handling                                    |                     |              | ≤ 500                      |         |     | mW   |
| Operating Temperature                                      |                     |              | 0 to +70                   |         |     | °C   |
| Storage Temperature                                        |                     |              | -40 to +85                 |         |     | °C   |
| Fiber Type                                                 |                     |              | SMF-28, 250μm Bare Fiber   |         |     |      |
| Package Dimension                                          |                     |              | (Φ) 3.0 x (L) 30.0         |         |     | mm   |

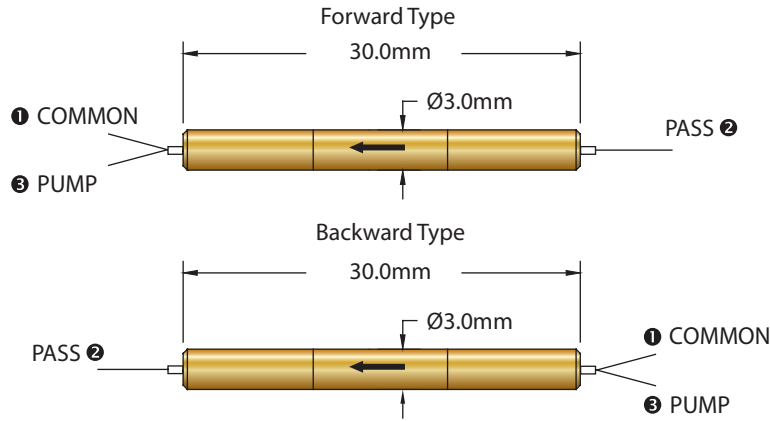
### Features

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

### Applications

- ◆ EDFA
- ◆ Raman Amplifiers

## Mechanical Drawing / Package Dimensions (dimension in 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.

