

Tap Coupler/Isolator Hybrid

TCIH-5 Series (1550nm)



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
- Systems Monitoring
- Fiberoptic Instruments
- Transmitters and Fiber Lasers
- Laboratory R&D

OPLINK's TCIH is a combination of a partial reflection filter and a polarization insensitive optical isolator. It 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). Its excellent characteristics and compact package make it highly suitable for EDFA and applications.

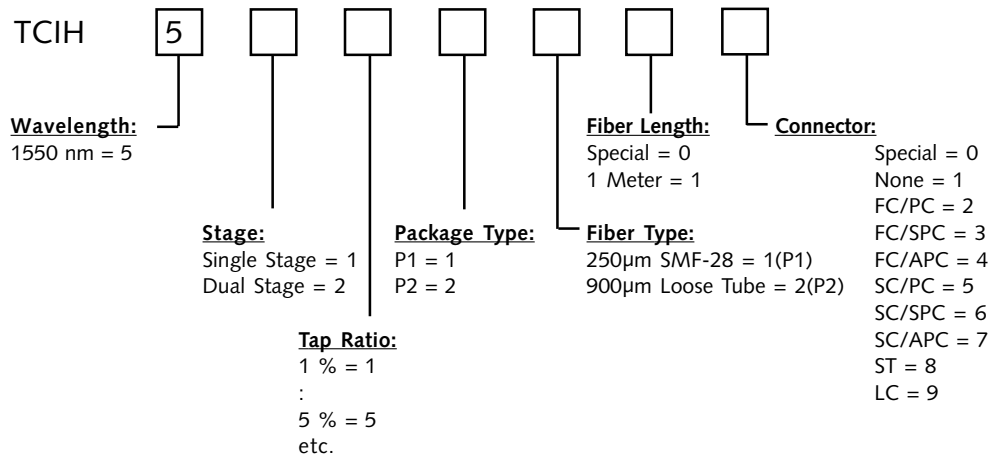
Performance Specifications

| TCIH-5 Series | | Single Stage | Dual Stage |
|--|----------------|----------------------------------|------------|
| Signal Channel Wavelength Range (nm) | | 1530 - 1565 | |
| Tap Channel Wavelength Range(nm) | | 1530 - 1565 | |
| Insertion Loss (dB) (over all wavelength range, 0 to +70°C, all SOP) | Signal Channel | ≤ 0.8 | ≤ 1.1 |
| | Tap Channel | See tap ratio table on next page | |
| Insertion Loss Variation (dB) (over all wavelenth range and all SOP) | Signal Channel | ≤ 0.2 | |
| | Tap Channel | ≤ 0.2 | |
| Isolation (dB) (over wavelength 1535-1565 nm and at 23°C, all SOP) | | ≥ 31 | ≥ 45 |
| | | ≥ 55 | |
| Return Loss (dB) | | ≥ 55 | |
| Polarization Dependent Loss (PDL) (dB) | | ≤ 0.1 | |
| Polarization Mode Dispersion (PMD) (ps) | | ≤ 0.25 | ≤ .05 |
| Directivity (dB) | | ≥ 55 | |
| Maximum Power Handling (mW) | | 300 | |
| Maximum Tensile Load (N) | | 5 | |
| Operating Temperature (°C) | | 0 to + 70 | |
| Storage Temperature (°C) | | - 40 to + 85 | |
| Package Dimension (mm) | | P1: (φ)5.5 x (L)34 | |
| | | P2: (φ)5.5 x (L)40 | |

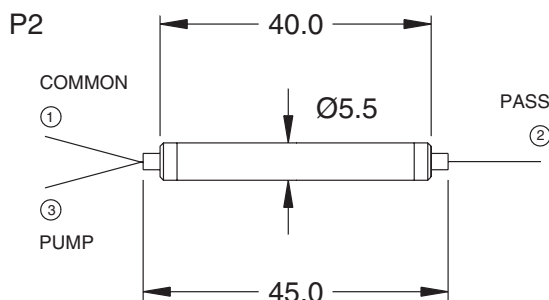
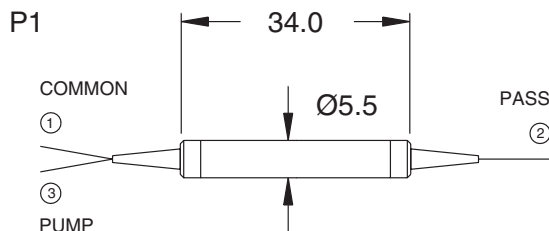
Values are referenced without connector loss

Ordering Information

Standard Oplink TCIH are specified below with appropriate part number options. If you require devices different than these standard devices, please contact our local Oplink Distributor, Sales Representative, or Factory Customer Service for ordering and price information.

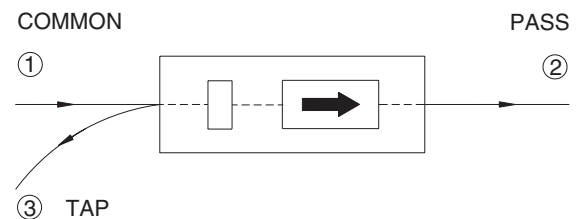


Package Dimensions:



Unit: mm

Configurations:



Coupler Tap Ratio Tolerance:

| % | dB |
|---------|---------------|
| 1 ± 0.2 | -19.2 ~ -21.0 |
| 2 ± 0.4 | -16.2 ~ -18.0 |
| 3 ± 0.6 | -14.4 ~ -16.2 |
| 4 ± 0.8 | -13.2 ~ -14.9 |
| 5 ± 1.0 | -12.2 ~ -14.0 |

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