

1450nm Polarization Insensitive Optical Isolator

1450nm Polarization Insensitive Optical Isolator is a fiber passive component built with singlemode fiber, it allows light signal to be delivered in one forward direction and avoid the back reflection light, it's widely used in amplifier system, fiber optic sensor system to protect the light source and lower down the optical signal noise.

Application:

Fiber Amplifier
Fiber Optic Sensor
Fiber Laser
Lab & Research

Features:

High Isolation
Low PDL
Low Insertion Loss
High Reliability



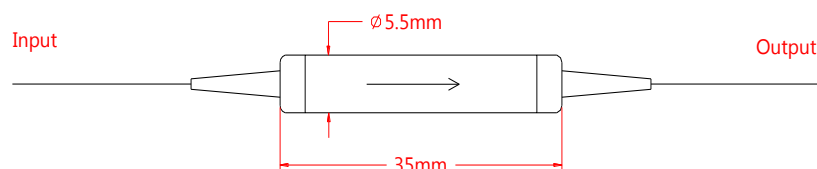
Specification:

| Parameter | Symbol | Value | | Unit |
|-----------------------------------|-----------|-----------------------|------------|------|
| Center Wavelength | λ | 1450 | | nm |
| Bandwidth | BW | ± 15 | | nm |
| Stage | | Single Stage | Dual Stage | - |
| Typ. Insertion Loss | IL | 0.3 | 0.4 | dB |
| Max. Insertion Loss | IL | 0.5 | 0.6 | dB |
| Typ. Peak Isolation | Iso | 42 | 58 | dB |
| Min. Isolation | Iso | 28 | 48 | dB |
| Max. Polarization Dependent Loss | PDL | 0.05 | 0.1 | dB |
| Max. Polarization Mode Dispersion | PMD | 0.2 | 0.05 | ps |
| Min. Return Loss | RL | 55 | | dB |
| Max. Optical Power (CW) | P | 500 | | mW |
| Max. Tensile Load | | 5 | | N |
| Fiber Type | | SMF-28e | | - |
| Operating Temperature | T | -5~70 | | °C |
| Storage Temperature | T | -40~85 | | °C |
| Package Dimension | | $\Phi 5.5 \times L35$ | | mm |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

Drawing:



Ordering Information (Part Number):

PIISO-**WWW**-**S**-**J**-**LL**-**CC**

| WWW | S | J | LL | CC |
|---------------|------------------|----------------------|--------------|--------------|
| Wavelength | Stage | Fiber Jacket | Fiber Length | Connector |
| 1310 - 1310nm | S - Single Stage | B - 250um Bare Fiber | 05 - 0.5m | NE - None |
| 1450 - 1450nm | D - Dual Stage | 9 - 900um Loose Tube | 10 - 1.0m | FA - FC/APC |
| 1480 - 1480nm | | 2 - 2.0mm Loose Tube | 15 - 1.5m | FU - FC/UPC |
| 1550 - 1550nm | | 3 - 3.0mm Loose Tube | 20 - 2.0m | SA - SC/APC |
| 1580 - 1580nm | | | SS - Specify | SU - SU/APC |
| | | | | LA - LC/APC |
| | | | | LU - LC/UPC |
| | | | | SS - Specify |