

## 2100nm Polarization Insensitive Optical Isolator

2100nm Polarization Insensitive Optical Isolator is a fiber passive component built with faraday crystal, it allows light signal to be delivered in one forward direction and avoid the back reflection light, it's widely used in Fiber Laser system, fiber optic sensor system to protect the light source and lower down the optical signal noise. High Power version is available upon request.

### Application:

Fiber Laser  
Fiber Optic Sensor  
Testing System  
Lab & Research

### Features:

High Isolation  
Low PDL  
Low Insertion Loss  
High Reliability



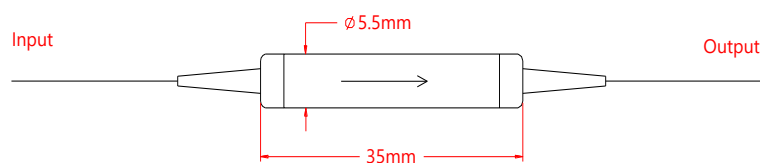
### Specification:

| Parameter                         | Symbol    | Value                   |            | Unit |
|-----------------------------------|-----------|-------------------------|------------|------|
| Center Wavelength                 | $\lambda$ | 2100                    |            | nm   |
| Bandwidth                         | BW        | $\pm 15$                |            | nm   |
| Stage                             |           | Single Stage            | Dual Stage | -    |
| Typ. Insertion Loss               | IL        | 0.8                     | 0.9        | dB   |
| Max. Insertion Loss               | IL        | 1.0                     | 1.2        | dB   |
| Typ. Peak Isolation               | Iso       | 28                      | 45         | dB   |
| Min. Isolation                    | Iso       | 23                      | 40         | dB   |
| Max. Polarization Dependent Loss  | PDL       | 0.15                    | 0.2        | dB   |
| Max. Polarization Mode Dispersion | PMD       | 0.2                     |            | ps   |
| Min. Return Loss                  | RL        | 50                      |            | dB   |
| Max. Optical Power (CW)           | P         | 500 or customized       |            | mW   |
| Max. Tensile Load                 |           | 5                       |            | N    |
| Fiber Type                        |           | SMF-28e or SM1950 fiber |            | -    |
| 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-**WWWW**-**S**-**FF**-**J**-**LL**-**CC**

| <b>WWWW</b>    | <b>S</b>         | <b>FF</b>    | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
|----------------|------------------|--------------|----------------------|--------------|--------------|
| Wavelength     | Stage            | Fiber Type   | Fiber Jacket         | Fiber Length | Connector    |
| 1900 - 1900nm  | S - Single Stage | S2 - SMF-28e | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1940 - 1940nm  | D - Dual Stage   | S1 - SM-1950 | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1950 - 1950nm  |                  |              | 2 - 2.0mm Loose Tube | 15 - 1.5m    | FU - FC/UPC  |
| 2000 - 2000nm  |                  |              | 3 - 3.0mm Loose Tube | 20 - 2.0m    | SA - SC/APC  |
| 2050 - 2050nm  |                  |              |                      | SS - Specify | SU - SU/APC  |
| 2100 - 2100nm  |                  |              |                      |              | LA - LC/APC  |
| SSSS - Specify |                  |              |                      |              | LU - LC/UPC  |
|                |                  |              |                      |              | SS - Specify |