

## 1650nm Polarization Insensitive Optical Isolator

1650nm 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. High Power version is available upon request.

### Application:

Fiber Amplifier  
Fiber Optic Sensor  
Fiber Laser  
Lab & Research

### Features:

High Isolation  
Low PDL  
Low Insertion Loss  
High Reliability



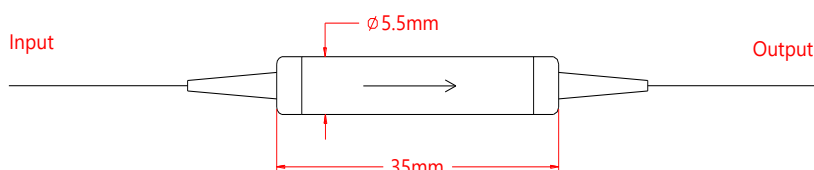
### Specification:

| Parameter                         | Symbol    | Value                 |            | Unit |
|-----------------------------------|-----------|-----------------------|------------|------|
| Center Wavelength                 | $\lambda$ | 1650                  |            | nm   |
| Bandwidth                         | BW        | $\pm 10$              |            | nm   |
| Stage                             |           | Single Stage          | Dual Stage | -    |
| Typ. Insertion Loss               | IL        | 0.4                   | 0.5        | dB   |
| Max. Insertion Loss               | IL        | 0.7                   | 0.8        | dB   |
| Typ. Peak Isolation               | Iso       | 32                    | 42         | dB   |
| Min. Isolation                    | Iso       | 26                    | 36         | dB   |
| Max. Polarization Dependent Loss  | PDL       | 0.2                   | 0.2        | 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 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-**WWW-S-J-LL-CC**

| <b>WWW</b>                                       | <b>S</b>                           | <b>J</b>                                                                                     | <b>LL</b>                                                        | <b>CC</b>                                                                                                           |
|--------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Wavelength                                       | Stage                              | Fiber Jacket                                                                                 | Fiber Length                                                     | Connector                                                                                                           |
| 1625 - 1625nm<br>1650 - 1650nm<br>SSSS - Specify | S - Single Stage<br>D - Dual Stage | B - 250um Bare Fiber<br>9 - 900um Loose Tube<br>2 - 2.0mm Loose Tube<br>3 - 3.0mm Loose Tube | 05 - 0.5m<br>10 - 1.0m<br>15 - 1.5m<br>20 - 2.0m<br>SS - Specify | NE - None<br>FA - FC/APC<br>FU - FC/UPC<br>SA - SC/APC<br>SU - SU/APC<br>LA - LC/APC<br>LU - LC/UPC<br>SS - Specify |