

## 1580nm PM Fiber Optic Isolator

1580nm PM Fiber Optic Isolator is a fiber passive component built with PM 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 Optic Amplifier  
Fiber Optic Sensor  
Fiber Laser  
Lab And Research

### Features:

High Extinction Ratio  
High Isolation  
Low Insertion Loss  
High Reliability



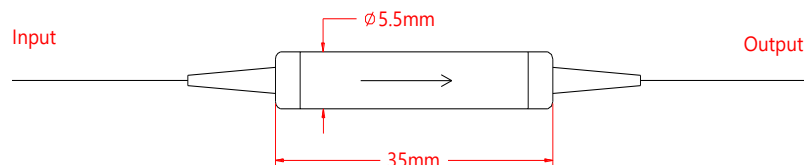
### Specification:

| Parameter                                   | Symbol    | Value                 |            | Unit |
|---------------------------------------------|-----------|-----------------------|------------|------|
| Center Wavelength                           | $\lambda$ | 1580                  |            | nm   |
| Bandwidth                                   | BW        | $\pm 15$              |            | 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   |
| Min. Extinction Ratio for Fast Axis Blocked | ER        | 22                    |            | dB   |
| Min. Extinction Ratio for Both Axes Working | ER        | 20                    |            | dB   |
| Min. Return Loss                            | RL        | 50                    |            | dB   |
| Max. Optical Power (CW)                     | P         | 500                   |            | mW   |
| Max. Tensile Load                           |           | 5                     |            | N    |
| Fiber Type                                  |           | PM Panda 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, ER will be 2dB lower, slow axis is default aligned to the connector key.

### Drawing:



### Ordering Information (Part Number):

| PMISO- <b>WWW</b> - <b>S</b> - <b>A</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |                  |                       |                      |              |              |
|----------------------------------------------------------------------------|------------------|-----------------------|----------------------|--------------|--------------|
| <b>WWW</b>                                                                 | <b>S</b>         | <b>A</b>              | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                                                                 | Stage            | Working Axis          | Fiber Jacket         | Fiber Length | Connector    |
| 1530 - 1530nm                                                              | S - Single Stage | F - Fast Axis Blocked | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1550 - 1550nm                                                              | D - Dual Stage   | Slow Axis Working     | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1560 - 1560nm                                                              |                  | B - Both Axes Working | 2 - 2.0mm Loose Tube | 15 - 1.5m    | FU - FC/UPC  |
| 1570 - 1570nm                                                              |                  |                       | 3 - 3.0mm Loose Tube | 20 - 2.0m    | SA - SC/APC  |
| 1580 - 1580nm                                                              |                  |                       |                      | SS - Specify | SU - SU/APC  |
| SSSS - Specify                                                             |                  |                       |                      |              | LA - LC/APC  |
|                                                                            |                  |                       |                      |              | LU - LC/UPC  |
|                                                                            |                  |                       |                      |              | SS - Specify |