

## 1550nm High Power Polarization Insensitive Optical Isolator

1550nm High Power 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. The optical power can be up to 20W CW upon request, if need pulse type please contact us to confirm.

### Application:

Fiber Amplifier  
Fiber Optic Sensor  
Fiber Laser  
Lab & Research

### Features:

High Power  
High Isolation  
Low Insertion Loss  
High Reliability



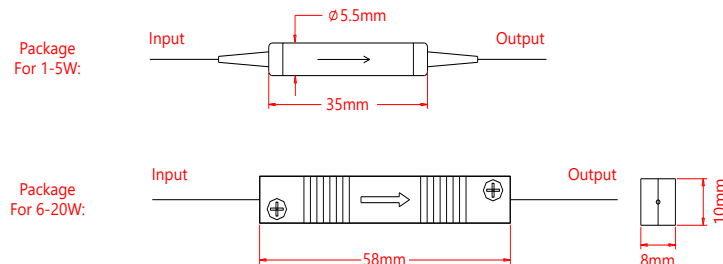
### Specification:

| Parameter                         | Symbol    | Value                                               |            | Unit |
|-----------------------------------|-----------|-----------------------------------------------------|------------|------|
| Center Wavelength                 | $\lambda$ | 1550                                                |            | 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   |
| Max. Polarization Dependent Loss  | PDL       | 0.15                                                |            | dB   |
| Max. Polarization Mode Dispersion | PMD       | 0.2                                                 |            | ps   |
| Min. Return Loss                  | RL        | 50                                                  |            | dB   |
| Max. Optical Power (CW)           | P         | 1, 3, 5, 10, 15, 20 or specify                      |            | W    |
| Max. Peak Power                   | P         | 5, 10 or specify                                    |            | KW   |
| Max. Tensile Load                 |           | 5                                                   |            | N    |
| Fiber Type                        |           | SMF-28e fiber                                       |            | -    |
| Operating Temperature             | T         | -5~70                                               |            | °C   |
| Storage Temperature               | T         | -40~85                                              |            | °C   |
| Package Dimension                 |           | $\Phi 5.5 \times L35$ or $L58 \times W10 \times H8$ |            | 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. connectors only 1W CW optical power guarantee.

### Drawing:



### Ordering Information (Part Number):

HPIISO-**WWW**-**S**-**HH**-**J**-**LL**-**CC**

| <b>WWW</b>     | <b>S</b>         | <b>HH</b>      | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
|----------------|------------------|----------------|----------------------|--------------|--------------|
| Wavelength     | Stage            | Handling Power | Fiber Jacket         | Fiber Length | Connector    |
| 1530 - 1530nm  | S - Single Stage | 01 - 1W        | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1550 - 1550nm  | D - Dual Stage   | 03 - 3W        | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1560 - 1560nm  |                  | 05 - 5W        | 2 - 2mm Loose Tube   | 15 - 1.5m    | FU - FC/UPC  |
| 1570 - 1570nm  |                  | 10 - 10W       | 3 - 3mm Loose Tube   | 20 - 2.0m    | SA - SC/APC  |
| 1580 - 1580nm  |                  | 15 - 15W       |                      | SS - Specify | SU - SU/APC  |
| SSSS - Specify |                  | 20 - 20W       |                      |              | LA - LC/APC  |
|                |                  | SS - Specify   |                      |              | LU - LC/UPC  |
|                |                  |                |                      |              | SS - Specify |