

High Power 1550nm PM Optical Isolator

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

Application:

Fiber Optic Amplifier
Fiber Optic Sensor
Fiber Laser
Lab & Research

Features:

High Power
High Isolation
Low Insertion Loss
High Reliability



Specification:

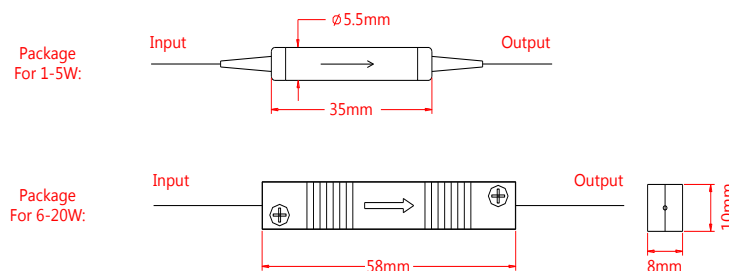
| Parameter | Symbol | Value | | Unit |
|---|-----------|---|------------|------|
| Center Wavelength | λ | 1550 | | nm |
| Bandwidth | BW | ± 20 | | nm |
| Stage | | Single Stage | Dual Stage | - |
| Typ. Insertion Loss | IL | 0.3 | 0.4 | dB |
| Max. Insertion Loss | IL | 0.5 | 0.6 | dB |
| Typ. Peak 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 | 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 | | PM Panda 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. ER will be 2dB lower.

Slow axis is default aligned to the connector key. Connectors only 1W CW optical power guarantee.

Drawing:



Ordering Information (Part Number):

HPMISO-**WWW**-**S**-**A**-**HH**-**J**-**LL**-**CC**

| WWW | S | A | HH | J | LL | CC |
|---------------|------------------|-----------------------|----------------|----------------------|--------------|--------------|
| Wavelength | Stage | Working Axis | Handling Power | Fiber Jacket | Fiber Length | Connector |
| 1310 - 1310nm | S - Single Stage | F - Fast axis Blocked | 01 - 1W | B - 250um Bare Fiber | 05 - 0.5m | NE - None |
| 1450 - 1450nm | D - Dual Stage | Slow Axis working | 03 - 3W | 9 - 900um Loose Tube | 10 - 1.0m | FA - FC/APC |
| 1480 - 1480nm | | B - Both Axes Working | 05 - 5W | | 15 - 1.5m | FU - FC/UPC |
| 1550 - 1550nm | | | 10 - 10W | | 20 - 2.0m | SA - SC/APC |
| 1580 - 1580nm | | | 15 - 15W | | SS - Specify | SU - SU/APC |
| | | | 20 - 20W | | | LA - LC/APC |
| | | | SS - Specify | | | LU - LC/UPC |
| | | | | | | SS - Specify |