

## High Power 1080nm PM Optical Isolator

High Power 1080nm Polarization Maintaining Optical Isolator is a fiber passive component built with TGG crystal, 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 50W 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:

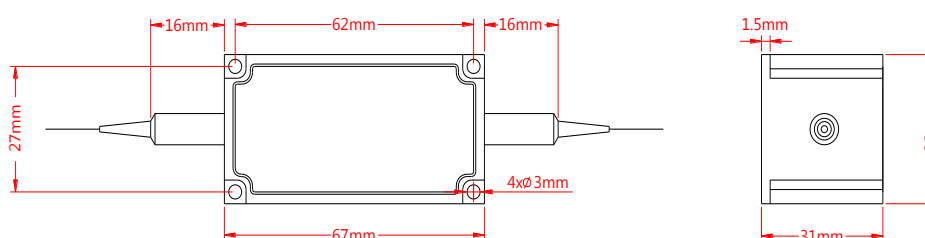
| Parameter                                   | Symbol    | Value                          | Unit |
|---|-----------|--------------------------------|------|
| Center Wavelength                           | $\lambda$ | 1080                           | nm   |
| Bandwidth                                   | BW        | $\pm 5$                        | nm   |
| Typ. Insertion Loss                         | IL        | 0.8                            | dB   |
| Max. Insertion Loss                         | IL        | 1.0                            | dB   |
| Typ. Peak Isolation                         | Iso       | 32                             | dB   |
| Min. Isolation                              | Iso       | 25                             | 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        | 45                             | dB   |
| Max. Optical Power (CW)                     | P         | 1, 3, 5, 10, 20, 50 or specify | W    |
| Max. Peak Power                             | P         | 5, 10, 20 or specify           | KW   |
| Max. Tensile Load                           |           | 5                              | N    |
| Fiber Type                                  |           | PM Panda Fiber                 | -    |
| Operating Temperature                       | T         | +10~50                         | °C   |
| Storage Temperature                         | T         | 0~60                           | °C   |
| Package Dimension                           |           |                                | 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**-**A**-**HH**-**J**-**LL**-**CC**

| <b>WWW</b>    | <b>A</b>                                   | <b>HH</b>      | <b>J</b>                                     | <b>LL</b>    | <b>CC</b>   |
|---------------|--|----------------|--|--------------|-------------|
| Wavelength    | Working Axis                               | Handling Power | Fiber Jacket                                 | Fiber Length | Connector   |
| 1030 - 1030nm | F - Fast axis Blocked<br>Slow Axis working | 01 - 1W        | B - 250um Bare Fiber<br>9 - 900um Loose Tube | 05 - 0.5m    | NE - None   |
| 1040 - 1040nm |  | 03 - 3W        |  | 10 - 1.0m    | FA - FC/APC |
| 1050 - 1050nm | B - Both Axes Working                      | 05 - 5W        |  | 15 - 1.5m    | FU - FC/UPC |
| 1053 - 1053nm |  | 10 - 10W       |  | 20 - 2.0m    | SA - SC/APC |
| 1060 - 1060nm |  | 20 - 20W       |  | SS - Specify | SU - SU/APC |
| 1064 - 1064nm |  | 50 - 50W       |  |              | LA - LC/APC |
| 1080 - 1080nm |  | SS - Specify   |  |              | LU - LC/UPC |
|               |  |                |  |              |             |