

## 785nm PM Fiber Optic Isolator

785nm PM Fiber Optic 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 Quantum Communication system, Fiber Laser system to protect the light source and lower down the system optical signal noise. The high power type is available upon request.

### Application:

Quantum Communication  
Fiber Laser  
Coherent Detecting  
Lab & Research

### Features:

High Isolation  
High Extinction Ratio  
Low Insertion Loss  
High Reliability



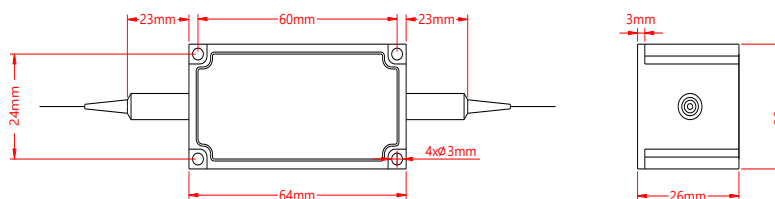
### Specification:

| Parameter               | Symbol    | Value             | Unit |
|-------------------------|-----------|-------------------|------|
| Center Wavelength       | $\lambda$ | 785               | 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   | ER        | 20                | dB   |
| Min. Return Loss        | RL        | 45                | dB   |
| Max. Optical Power (CW) | P         | 500 or customized | mW   |
| Max. Tensile Load       |           | 5                 | N    |
| Fiber Type              |           | PM Panda fiber    | -    |
| Operating Temperature   | T         | +10~50            | °C   |
| Storage Temperature     | T         | 0~60              | °C   |
| Package Dimension       |           | 64x28x26          | 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, ER will be 2dB lower, RL will be 5dB lower.

### Drawing:



### Ordering Information (Part Number):

| PMISO- <b>WWW</b> - <b>A</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |                                            |                      |              |              |
|-----------------------------------------------------------------|--------------------------------------------|----------------------|--------------|--------------|
| <b>WWW</b>                                                      | <b>A</b>                                   | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                                                      | Working Axis                               | Fiber Jacket         | Fiber Length | Connector    |
| 760 - 760nm                                                     | F - Fast Axis Blocked<br>Slow Axis Working | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 780 - 780nm                                                     |                                            | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 785 - 785nm                                                     | B - Both Axes Working                      | 2 - 2mm Loose Tube   | 15 - 1.5m    | FU - FC/UPC  |
| 790 - 790nm                                                     |                                            | 3 - 3mm Loose Tube   | 20 - 2.0m    | SA - SC/APC  |
| 793 - 793nm                                                     |                                            |                      | SS - Specify | SU - SU/APC  |
| 795 - 795nm                                                     |                                            |                      |              | LA - LC/APC  |
| SSS - Specify                                                   |                                            |                      |              | LU - LC/UPC  |
|                                                                 |                                            |                      |              | SS - Specify |