

## 1550±100nm High Power Broadband PM Fiber Optic Isolator

1550±100nm High Power Broadband PM Optical Isolator is a fiber passive component built with Faraday crystal, it allows light signal to be delivered in one forward direction and avoid the back reflection light, it's widely used in OCT system, fiber optic sensor system to protect the light source and lower down the system optical signal noise. The higher power type is available upon request.

### Application:

OCT  
Fiber Optic Sensor  
Testing System  
Lab & Research

### Feature

Wide Band  
High Isolation  
Low Insertion Loss  
High Reliability



### Specification:

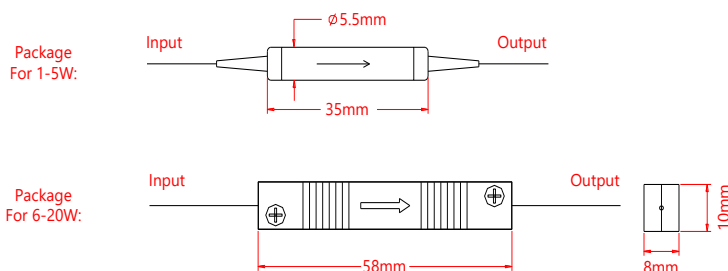
| Parameter                                   | Symbol    | Value                               |            | Unit |
|---------------------------------------------|-----------|-------------------------------------|------------|------|
| Center Wavelength                           | $\lambda$ | 1550                                |            | nm   |
| Bandwidth                                   | BW        | ±100                                |            | nm   |
| Stage                                       |           | Single Stage                        | Dual Stage | -    |
| Typ. Insertion Loss                         | IL        | 0.7                                 | 1.2        | dB   |
| Max. Insertion Loss                         | IL        | 1.0                                 | 1.5        | dB   |
| Typ. Peak Isolation                         | Iso       | 25                                  | 32         | dB   |
| Min. Isolation                              | Iso       | 17                                  | 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        | 50                                  |            | dB   |
| Max. Optical Power (CW)                     | P         | 0.5, 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 1550 Panda Fiber                 |            | -    |
| Operating Temperature                       | T         | -5~70                               |            | °C   |
| Storage Temperature                         | T         | -40~85                              |            | °C   |
| Package Dimension                           |           | Φ5.5×L35, Φ5.5×L60 or L58xW10xH8    |            | 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):

HBPMI-**WWW**-**BB**-**S**-**A**-**HH**-**J**-**LL**-**CC**

| WWW                             | BB                       | S                                  | A                                                                   | HH                                                                                | J                                                                                            | LL                                                               | CC                                                      |
|---------------------------------|--------------------------|------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------|
| Wavelength                      | Bandwidth                | Stage                              | Working Axis                                                        | Handling Power                                                                    | Fiber Jacket                                                                                 | Fiber Length                                                     | Connector                                               |
| 1550 - 1550nm<br>SSSS - Specify | 1H - 100nm<br>2H - 200nm | S - Single Stage<br>D - Dual Stage | F - Fast axis Blocked<br>Slow Axis working<br>B - Both Axes Working | 01 - 1W<br>03 - 3W<br>05 - 5W<br>10 - 10W<br>15 - 15W<br>20 - 20W<br>SS - Specify | B - 250um Bare Fiber<br>9 - 900um Loose Tube<br>2 - 2.0mm Loose Tube<br>3 - 3.0mm Loose Tube | 05 - 0.5m<br>10 - 1.0m<br>15 - 1.5m<br>20 - 2.0m<br>SS - Specify | NE - None<br>FA - FC/APC<br>FU - FC/UPC<br>SS - Specify |