

## 1550/780nm 1x2 PM Filter WDM

1550/780nm 1x2 PM Filter WDM is a fiber component built with thin-film filter technology, it can be used to separate or combine 1550nm and 780nm wavelength signal with PM Panda fiber, it's widely used in Quantum Communication Systems and Fiber SHG Systems, the high power type is available upon request.

### Application:

Quantum Communication  
Fiber SHG  
Optical Diffraction System  
Lab And Research

### Features

Epoxy Free  
High Isolation  
Low Insertion Loss  
Optical Path Reversibility



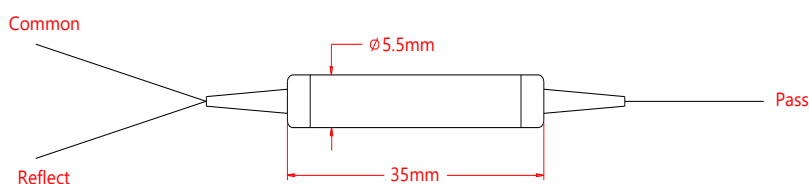
### Specification:

| Parameter                                            | Symbol    | Value                                                                                  | Unit |
|------------------------------------------------------|-----------|----------------------------------------------------------------------------------------|------|
| Type                                                 |           | P1550 R780                                                                             | nm   |
| Pass Band                                            | $\lambda$ | 1550 (1510-1580)                                                                       | nm   |
| Reflect Band                                         | $\lambda$ | 780 (770-790)                                                                          | nm   |
| Max. Insertion Loss @Pass Channel                    | IL        | 0.9                                                                                    | dB   |
| Max. Insertion Loss @Reflect Channel (PM 1550 fiber) | IL        | 0.9                                                                                    | dB   |
| Min. Isolation @Pass Channel                         | Iso       | 25                                                                                     | dB   |
| Min. Isolation @Reflect Channel                      | Iso       | 15                                                                                     | dB   |
| Max. Channel Flatness                                |           | 0.3                                                                                    | dB   |
| Min. Extinction Ratio                                | ER        | 20                                                                                     | dB   |
| Min. Directivity                                     |           | 50                                                                                     | dB   |
| Min. Return Loss                                     | RL        | 50                                                                                     | dB   |
| Max. Optical Power (CW)                              | P         | 500 or customized                                                                      | mW   |
| Max. Tensile Load                                    |           | 5                                                                                      | N    |
| Fiber Type                                           |           | PM 1550 fiber on Common & Pass Port<br>PM 1550, PM 850 or HI 780 fiber on Reflect Port | -    |
| Operating Temperature                                | T         | -5~75                                                                                  | °C   |
| Storage Temperature                                  | T         | -40~85                                                                                 | °C   |
| Package Dimension                                    |           | Φ5.5×L35                                                                               | 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, slow axis is default aligned to the connector key.

### Drawing:



### Ordering Information (Part Number):

| PFWDM- <b>WWW/WWW-A-FF-J-LL-CC</b>       |                                            |                                          |                                              |                                                                  |                                                                                                                     |
|------------------------------------------|--------------------------------------------|------------------------------------------|----------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>WWW/WWW</b>                           | <b>A</b>                                   | <b>FF</b>                                | <b>J</b>                                     | <b>LL</b>                                                        | <b>CC</b>                                                                                                           |
| Wavelength                               | Working Axis                               | Fiber Type on Reflect Port               | Fiber Jacket                                 | Fiber Length                                                     | Connector                                                                                                           |
| 1550/775 - 1550nm Pass,<br>775nm Reflect | F - Fast Axis Blocked<br>Slow axis Working | P7 - PM780-HP Fiber<br>P8 - PM 850 Fiber | B - 250um Bare Fiber<br>9 - 900um 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>SA - SC/APC<br>SU - SU/APC<br>LA - LC/APC<br>LU - LC/UPC<br>SS - Specify |
| 1550/780 - 1550nm Pass,<br>780nm Reflect | B - Both Axes Working                      | P5 - PM 1550 Fiber<br>H7 - HI 780 Fiber  |                                              |                                                                  |                                                                                                                     |
| 1560/780 - 1560nm Pass,<br>780nm Reflect |                                            |                                          |                                              |                                                                  |                                                                                                                     |