

## 1780nm PM Fixed In-line Optical Attenuator

1780nm PM Fixed In-line Optical Attenuator is a fiber component which can attenuate the optical power with a fixed attenuation value, the attenuation value can be up to 30dB, it's widely used in Quantum Communication system, fiber laser and Testing System. High power type is available upon request.

### Application:

Quantum Communication  
Fiber Laser  
Testing System  
Lab And Research

### Features:

High Precision  
High Extinction Ratio  
High Attenuation  
High Reliability



### Specification:

| Parameter                 | Symbol    | Value                                                                                                                    | Unit |
|---------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------|------|
| Center Wavelength         | $\lambda$ | 1780                                                                                                                     | nm   |
| Bandwidth                 | BW        | $\pm 10$                                                                                                                 | nm   |
| Attenuation and Tolerance |           | 1 $\pm$ 0.1, 2 $\pm$ 0.2, 3 $\pm$ 0.3, 5 $\pm$ 0.7, 10 $\pm$ 1.0, 15 $\pm$ 1.8, 20 $\pm$ 2.5, 30 $\pm$ 3.0 or customized | dB   |
| Min. Extinction Ratio     | ER        | 20                                                                                                                       | dB   |
| Min. Return Loss          | RL        | 50                                                                                                                       | dB   |
| Max. Optical Power (CW)   | P         | 500                                                                                                                      | mW   |
| Max. Tensile Load         |           | 5                                                                                                                        | N    |
| Fiber Type                |           | PM 1950 or PM 1550 fiber                                                                                                 | -    |
| Operating Temperature     | T         | -5~70                                                                                                                    | °C   |
| Storage Temperature       | T         | -40~85                                                                                                                   | °C   |
| Package Dimension         |           | $\Phi 3.0 \times L54$                                                                                                    | mm   |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, ER will be 2dB lower, RL will be 5dB lower, slow axis is default aligned to the connector key.

### Drawing:



### Ordering Information (Part Number):

| PMFIA- <b>WWW</b> - <b>PP</b> - <b>AA</b> - <b>FF</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |           |              |              |                      |              |              |
|------------------------------------------------------------------------------------------|-----------|--------------|--------------|----------------------|--------------|--------------|
| <b>WWW</b>                                                                               | <b>PP</b> | <b>AA</b>    | <b>FF</b>    | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                                                                               | Port      | Attenuation  | Fiber Type   | Fiber Jacket         | Fiber Length | Connector    |
| 1700 - 1700nm                                                                            | 11 - 1x1  | 01 - 1dB     | P1 - PM 1950 | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1720 - 1720nm                                                                            |           | 02 - 2dB     | P5 - PM 1550 | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1750 - 1750nm                                                                            |           | 03 - 3dB     |              | 2 - 2mm Loose Tube   | 15 - 1.5m    | FU - FC/UPC  |
| 1762 - 1762nm                                                                            |           | 05 - 5dB     |              | 3 - 3mm Loose Tube   | 20 - 2.0m    | SA - SC/APC  |
| 1780 - 1780nm                                                                            |           | 10 - 10dB    |              |                      | SS - Specify | SU - SU/APC  |
| SSSS - Specify                                                                           |           | 15 - 15dB    |              |                      |              | LA - LC/APC  |
|                                                                                          |           | 20 - 20dB    |              |                      |              | LU - LC/UPC  |
|                                                                                          |           | 30 - 30dB    |              |                      |              | SS - Specify |
|                                                                                          |           | SS - Specify |              |                      |              |              |
|                                                                                          |           |              |              |                      |              |              |