

## 1860nm Faraday Rotator Mirror

1860nm Faraday Rotator Mirror is a fiber component which can change state of polarization (SOP), the polarization light will rotate 45° when the input light passes the faraday rotator, and will rotate another 45° after the mirror turns the light back, the output light will have a polarization state rotated 90°, and orthogonal to the input polarization state. It's widely used in Fiber Laser, Fiber Amplifier System and Fiber Optic Sensor. High power version is available upon request.

### Application:

Fiber Optic Amplifier  
Fiber Optic Sensor  
Fiber Laser  
Lab And Research

### Features:

High Extinction Ratio  
High Power Available  
Low Insertion Loss  
High Reliability



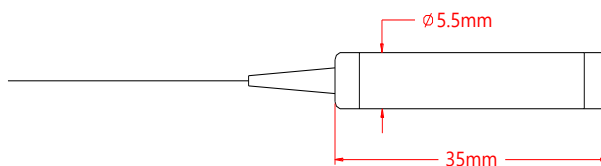
### Specification:

| Parameter                            | Symbol    | Value                 |            | Unit   |
|--------------------------------------|-----------|-----------------------|------------|--------|
| Center Wavelength                    | $\lambda$ | 1860                  |            | nm     |
| Bandwidth                            | BW        | $\pm 15$              |            | nm     |
| Faraday Rotate Angle (Single Pass)   |           | $45 \pm 3$            | $90 \pm 3$ | Degree |
| Typ. Insertion Loss                  | IL        | 0.5                   | 0.8        | dB     |
| Max. Insertion Loss                  | IL        | 0.9                   | 1.2        | dB     |
| Min. Extinction Ratio (for PM fiber) | ER        | 18                    |            | dB     |
| Max. PDL (for SM fiber)              | PDL       | 0.15                  |            | dB     |
| Max. Optical Power (CW)              | P         | 500 or specify        |            | mW     |
| Max. Tensile Load                    |           | 5                     |            | N      |
| Fiber Type                           |           | PM Panda or SM fiber  |            | -      |
| Operating Temperature                | T         | $-5 \sim 70$          |            | °C     |
| Storage Temperature                  | T         | $-40 \sim 85$         |            | °C     |
| Package Dimension                    |           | $\Phi 5.5 \times L35$ |            | 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):

| FRM- <b>WWWW</b> - <b>A</b> - <b>FF</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |                      |              |                      |              |              |
|----------------------------------------------------------------------------|----------------------|--------------|----------------------|--------------|--------------|
| <b>WWWW</b>                                                                | <b>A</b>             | <b>FF</b>    | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                                                                 | Rotate Angle         | Fiber Type   | Fiber Jacket         | Fiber Length | Connector    |
| 1850 - 1850nm                                                              | 4 - 45° (Total 90°)  | P5 - PM 1550 | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1860 - 1860nm                                                              | 9 - 90° (Total 180°) | P9 - PM 1950 | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1870 - 1870nm                                                              |                      | S2 - SM-28e  | 2 - 2.0mm Loose Tube | 15 - 1.5m    | FU - FC/UPC  |
| 1890 - 1890nm                                                              |                      | S9 - SM 1950 | 3 - 3.0mm Loose Tube | 20 - 2.0m    | SA - SC/APC  |
| SSSS - Specify                                                             |                      |              |                      | SS - Specify | SU - SU/APC  |
|                                                                            |                      |              |                      |              | LA - LC/APC  |
|                                                                            |                      |              |                      |              | LU - LC/UPC  |
|                                                                            |                      |              |                      |              | SS - Specify |