



## Polarization Maintaining Optical Circulator (PM CIR Series)

Rev 11

### Description

The Polarization Maintaining Optical Circulator is a compact high performance lightwave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. This PM Optical Circulator provides high isolation, low insertion loss, high extinction ratio, and excellent environmental stability.

### Key Features

- High Isolation
- Low Insertion Loss
- High Extinction Ratio

### Applications

- Fiber Sensing
- Raman Amplifier
- EDFA

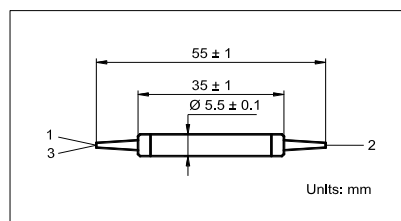
### Specifications

| Parameter                                | Unit | Value              |                    |
|------------------------------------------|------|--------------------|--------------------|
| Type                                     | -    | Type A             | Type B             |
| Center Wavelength ( $\lambda_c$ )        | nm   | 1310 or 1550       |                    |
| Operating Wavelength Range               | nm   | $\lambda_c \pm 30$ | $\lambda_c \pm 20$ |
| Typ. Insertion Loss, $\lambda_c$ , 23 °C | dB   | 0.7                | 0.6                |
| Max. Insertion Loss                      | dB   | 0.9                | 0.8                |
| Peak Isolation                           | dB   | 52                 | 40                 |
| Typ. Isolation, $\lambda_c$ , 23 °C      | dB   | 46                 | 30                 |
| Min. Isolation, 23 °C                    | dB   | 40                 | 20                 |
| Min. Extinction Ratio, 23 °C             | dB   | 22                 | 20                 |
| Min. Crosstalk                           | dB   | 50                 |                    |
| Min. Return Loss                         | dB   | 50                 |                    |
| Max. Optical Power (Continuous Wave)     | mW   | 300                |                    |
| Max. Tensile Load                        | N    | 5                  |                    |
| Fiber Type                               | -    | PM Panda Fiber     |                    |
| Operating Temperature                    | °C   | - 5 to + 70        |                    |
| Storage Temperature                      | °C   | - 40 to + 85       |                    |

<sup>1</sup>IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

<sup>2</sup>The optical path is aligned to slow axis and fast axis is blocked.

### Package Dimensions



### Ordering Information

PM CIR-①①-②-③-④-⑤

| ①①: Wavelength | ②: Type    | ③: Connector Type |             | ④: Fiber Jacket       | ⑤: Fiber Length |
|----------------|------------|-------------------|-------------|-----------------------|-----------------|
| 31 - 1310 nm   | 1 - Type A | 1 - FC/UPC        | 4 - SC/APC  | B - 250 μm Bare Fiber | Q - 0.75 m      |
| 55 - 1550 nm   | 2 - Type B | 2 - FC/APC        | N - None    | L - 900 μm Loose Tube | S - Specify     |
| SS - Specify   |            | 3 - SC/UPC        | S - Specify | S - Specify           |                 |

Tel: +86 756 389 8035

Web: [www.fiber-resources.com](http://www.fiber-resources.com)Email: [sales@fiber-resources.com](mailto:sales@fiber-resources.com)