

## Introduction



CSRayzer's **Polarization Maintaining Isolator(PMI)** series product, is an in-line pig-tailed micro-optic component allows light to be transmitted only in the forward direction while blocking the backward transmission. It features high isolation, high extinction and low insertion loss. It is ideal for fiber laser、fiber amplifier、fiber communication and fiber sensor.



## Specification

| Parameters            | Unit | Values       |         |            |         |                |         |            |         |
|-----------------------|------|--------------|---------|------------|---------|----------------|---------|------------|---------|
| Center Wavelength     | nm   | 1064         |         |            |         | 1310/1480/1550 |         |            |         |
| Stage                 | -    | Single Stage |         | Dual Stage |         | Single Stage   |         | Dual Stage |         |
| Grade                 | -    | Grade P      | Grade A | Grade P    | Grade A | Grade P        | Grade A | Grade P    | Grade A |
| Typ. Peak Isolation   | dB   | 40           | 38      | 55         | 52      | 35             | 32      | 50         | 45      |
| Min. Isolation @23℃)  | dB   | 35           | 32      | 45         | 42      | 25             | 23      | 45         | 42      |
| Typ. Insertion Loss   | dB   | 1.4          | 1.6     | 2.3        | 2.5     | 0.4            | 0.5     | 0.5        | 0.6     |
| Max. Insertion Loss   | dB   | 1.8          | 2.0     | 3.2        | 3.4     | 0.5            | 0.6     | 0.6        | 0.8     |
| Typ. Extinction Ratio | dB   | 22           | 20      | 22         | 20      | 25             | 23      | 25         | 23      |
| Min. Return Loss      | dB   | 55/50        | 55/50   | 55/50      | 55/50   | 55/50          | 55/50   | 55/50      | 55/50   |
| Handling Power        | mW   | 300          |         |            |         | 500            |         |            |         |
| Max. Tensile Load     | N    | 5            |         |            |         |                |         |            |         |
| Fiber Type            | -    | PM980        |         |            |         | PM1550         |         |            |         |
| Working Temperature   | ℃    | -40 to +75℃  |         |            |         |                |         |            |         |
| Storage Temperature   | ℃    | -55 to +85℃  |         |            |         |                |         |            |         |

\*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.

\*Above specifications are for device without connector and may change without notice.

## Ordering Information

PMI-①-②-③-④-⑤-⑥-⑦-⑧-⑨-⑩

| ①Central Wavelength | ②Grade    | ③Stage         | ④Package Dimension | ⑤Fiber Type   | ⑥Fiber Length | ⑦Fiber Jacket      | ⑧Connector | ⑨Working Axis       |
|---------------------|-----------|----------------|--------------------|---------------|---------------|--------------------|------------|---------------------|
| 1064-1064nm         | P-P Grade | S-Single Stage | 5.5x35             | PM980-PM980   | 1-1M          | 0-Bare Fiber       | FU-FC/PC   | F-Fast Axis Blocked |
| 1550-1550nm         | A-A Grade | D-Dual Stage   | 2.5x20             | PM1550-PM1550 | S-Specify     | 1-900μm Loose Tube | FA-FC/APC  | B-Both Axis Blocked |
| S-Specify           |           |                | 2.5x15             | S-Specify     |               | 2-2mm Cable        | S-specify  |                     |
|                     |           |                |                    |               |               | 3-3mm Cable        |            |                     |