

## 1550nm 4-port Polarization Insensitive Optical Circulator

1550nm 4-port Polarization Insensitive Optical Circulator is a fiber passive component built with SM fiber, which can change signal light transmission path, the signal can be delivered from Port 1 to Port 2, Port 2 to Port 3, Port 3 to Port 4, the high isolation can block the back reflection light. It's widely used in WDM System, Fiber Optic Sensor and Coherent Detecting field.

### Application:

Fiber Optic Sensor  
CWDM, DWDM System  
Coherent Detecting  
Fiber Optic Amplifier

### Features:

Low PDL  
High Isolation  
Low Insertion Loss  
High Reliability



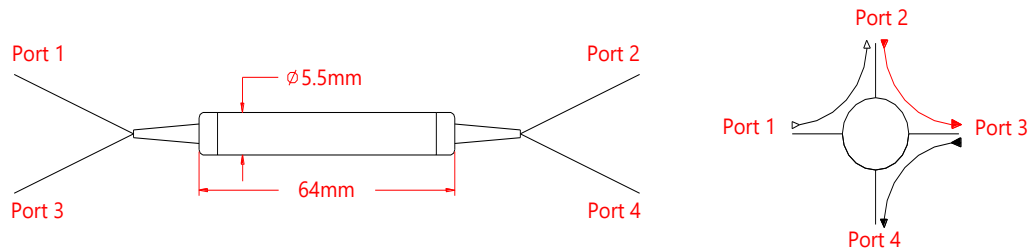
### Specification:

| Parameter                                         | Symbol    | Value                 | Unit |
|---------------------------------------------------|-----------|-----------------------|------|
| Center Wavelength                                 | $\lambda$ | 1550                  | nm   |
| Bandwidth                                         | BW        | $\pm 30$              | nm   |
| Typ. Insertion Loss (Port 1 to 2, 2 to 3, 3 to 4) | IL        | 0.8                   | dB   |
| Max. Insertion Loss (Port 1 to 2, 2 to 3, 3 to 4) | IL        | 1.0                   | dB   |
| Typ. Isolation (Port 2 to 1, 3 to 2, 4 to 3)      | Iso       | 50                    | dB   |
| Min. Isolation (Port 2 to 1, 3 to 2, 4 to 3)      | Iso       | 40                    | dB   |
| Max. Polarization Dependent Loss                  | PDL       | 0.15                  | dB   |
| Max. Polarization Mode Dispersion                 | PMD       | 0.1                   | ps   |
| Min. Cross Talk                                   | Ct        | 50                    | dB   |
| Min. Directivity                                  |           | 50                    | dB   |
| Min. Return Loss                                  | RL        | 50                    | dB   |
| Max. Optical Power (CW)                           | P         | 500                   | mW   |
| Max. Tensile Load                                 |           | 5                     | N    |
| Fiber Type                                        |           | SMF-28e fiber         | -    |
| Operating Temperature                             | T         | 0~70                  | ℃    |
| Storage Temperature                               | T         | -40~85                | ℃    |
| Package Dimension                                 |           | $\Phi 5.5 \times L64$ | mm   |

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

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

### Drawing:



### Ordering Information (Part Number):

| PICIR- <b>WWW-P-J-LL-CC</b>                                                                                          |             |                                              |                                                                  |                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>WWW</b>                                                                                                           | <b>P</b>    | <b>J</b>                                     | <b>LL</b>                                                        | <b>CC</b>                                                                                                           |
| Wavelength                                                                                                           | Port        | Fiber Jacket                                 | Fiber Length                                                     | Connector                                                                                                           |
| 1510 - 1510nm<br>1530 - 1530nm<br>1550 - 1550nm<br>1560 - 1560nm<br>1570 - 1570nm<br>1580 - 1580nm<br>SSSS - Specify | 4 - 4 Ports | 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 |