

## 1030nm 3-port Polarization Insensitive Optical Circulator

1030nm TGG 3-port Polarization Insensitive Optical Circulator is a fiber passive component built with TGG crystal, which can change signal light transmission path, the signal can be delivered from Port 1 to Port 2, the other signal light from Port 2 to Port 3, the high isolation can block the back reflection light. It's widely used in Fiber Amplifier System, Fiber Optic Sensor and Testing System field. If need higher power version please tell us to confirm.

### Application:

Fiber Optic Sensor  
Fiber Laser  
Coherent Detecting  
Fiber Optic Amplifier

### Features:

Low PDL  
High Isolation  
Low Insertion Loss  
High Reliability



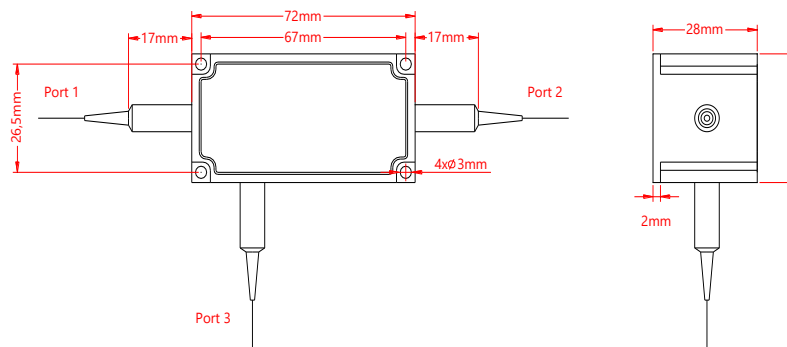
### Specification:

| Parameter                                 | Symbol    | Value         | Unit               |
|---|-----------|---------------|--------------------|
| Center Wavelength                         | $\lambda$ | 1030          | nm                 |
| Bandwidth                                 | BW        | $\pm 5$       | nm                 |
| Typ. Insertion Loss (Port 1 to 2, 2 to 3) | IL        | 1.2           | dB                 |
| Max. Insertion Loss (Port 1 to 2, 2 to 3) | IL        | 1.5           | dB                 |
| Typ. Isolation (Port 2 to 1, 3 to 2)      | Iso       | 25            | dB                 |
| Min. Isolation (Port 2 to 1, 3 to 2)      | Iso       | 22            | dB                 |
| Max. Polarization Dependent Loss          | PDL       | 0.15          | dB                 |
| Min. Cross Talk                           | Ct        | 45            | dB                 |
| Min. Return Loss                          | RL        | 45            | dB                 |
| Max. Optical Power (CW)                   | P         | 500           | mW                 |
| Max. Tensile Load                         |           | 5             | N                  |
| Fiber Type                                |           | HI 1060 fiber | -                  |
| Operating Temperature                     | T         | +10~50        | $^{\circ}\text{C}$ |
| Storage Temperature                       | T         | 0-60          | $^{\circ}\text{C}$ |
| Package Dimension                         |           |               | mm                 |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23 $^{\circ}\text{C}$ .

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

### Drawing:



### Ordering Information (Part Number):

| PICIR- <b>WWWW</b> -P-J-LL-CC |             |                      |              |              |
|-------------------------------|-------------|----------------------|--------------|--------------|
| <b>WWWW</b>                   | <b>P</b>    | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                    | Port        | Fiber Jacket         | Fiber Length | Connector    |
| 1030 - 1030nm                 | 3 - 3 Ports | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1040 - 1040nm                 |             | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1050 - 1050nm                 |             |                      | 15 - 1.5m    | FU - FC/UPC  |
| 1053 - 1053nm                 |             |                      | 20 - 2.0m    | SA - SC/APC  |
| 1060 - 1060nm                 |             |                      | SS - Specify | SU - SU/APC  |
| 1064 - 1064nm                 |             |                      |              | LA - LC/APC  |
|                               |             |                      |              | LU - LC/UPC  |
|                               |             |                      |              | SS - Specify |