

## 1120nm High Power 3-port Polarization Insensitive Optical Circulator

1120nm High Power 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 Quantum Communication, Fiber Laser and Coherent Detecting field. If need pulse type please tell us to confirm.

### Application:

Quantum Communication  
Fiber Laser  
Coherent Detecting  
Lab & Research

### Features:

High Power  
High Isolation  
Low Insertion Loss  
High Reliability



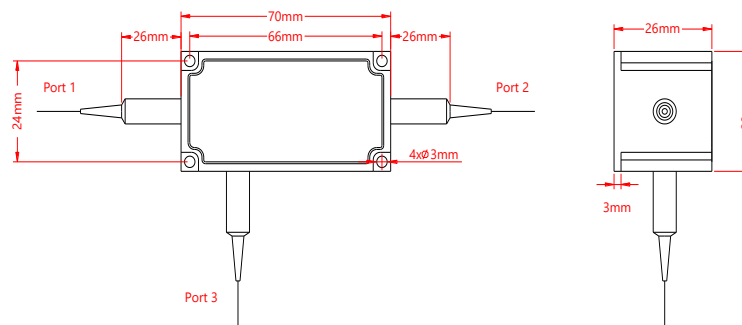
### Specification:

| Parameter                                 | Symbol    | Value                         | Unit |
|-------------------------------------------|-----------|-------------------------------|------|
| Center Wavelength                         | $\lambda$ | 1120                          | nm   |
| Bandwidth                                 | BW        | $\pm 10$                      | nm   |
| Typ. Insertion Loss (Port 1 to 2, 2 to 3) | IL        | 0.9                           | dB   |
| Max. Insertion Loss (Port 1 to 2, 2 to 3) | IL        | 1.2                           | 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         | 1, 3, 5, 10, 20 or customized | W    |
| Max. Peak Power                           | P         | 5, 10, 20 or customized       | kW   |
| Max. Tensile Load                         |           | 5                             | N    |
| Fiber Type                                |           | HI 1060 fiber                 | -    |
| Operating Temperature                     | T         | +10~50                        | °C   |
| Storage Temperature                       | T         | 0~60                          | °C   |
| Package Dimension                         |           | 70x28x26                      | 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, RL will be 5dB lower. connectors only 1W CW optical power guarantee.

### Drawing:



### Ordering Information (Part Number):

HPICIR-**WWW**-**P**-**HH**-**J**-**LL**-**CC**

| <b>WWW</b>                                                        | <b>P</b>    | <b>HH</b>                                                             | <b>J</b>                                                                                 | <b>LL</b>                                                        | <b>CC</b>                                               |
|-------------------------------------------------------------------|-------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------|
| Wavelength                                                        | Port        | Handling Power                                                        | Fiber Jacket                                                                             | Fiber Length                                                     | Connector                                               |
| 1100 - 1100nm<br>1120 - 1120nm<br>1150 - 1150nm<br>SSSS - Specify | 3 - 3 Ports | 01 - 1W<br>03 - 3W<br>05 - 5W<br>10 - 10W<br>20 - 20W<br>SS - Specify | B - 250um Bare Fiber<br>9 - 900um Loose Tube<br>2 - 2mm Loose Tube<br>3 - 3mm 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>SS - Specify |