

1550nm High Power 3-port Polarization Insensitive Optical Circulator

1550nm High Power 3-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, 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. The handling power can be up to 10W CW.

Application:

Fiber Optic Sensor
Fiber Optic Amplifier
Coherent Detecting
Testing System

Features:

High Power
High Isolation
Low Insertion Loss
High Reliability



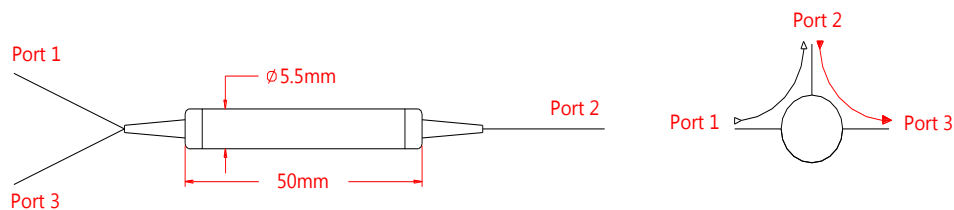
Specification:

| Parameter | Symbol | Value | Unit |
|---|-----------|-----------------------|--------------------|
| Center Wavelength | λ | 1550 | nm |
| Bandwidth | BW | ± 30 | nm |
| Typ. Insertion Loss (Port 1 to 2, 2 to 3) | IL | 0.8 | dB |
| Max. Insertion Loss (Port 1 to 2, 2 to 3) | IL | 1.0 | dB |
| Typ. Isolation (Port 2 to 1, 3 to 2) | Iso | 45 | dB |
| Min. Isolation (Port 2 to 1, 3 to 2) | Iso | 35 | 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 | 1, 3, 5, 10 | W |
| Max. Tensile Load | | 5 | N |
| Fiber Type | | SMF-28e fiber | - |
| Operating Temperature | T | -5~70 | $^{\circ}\text{C}$ |
| Storage Temperature | T | -40~85 | $^{\circ}\text{C}$ |
| Package Dimension | | $\Phi 5.5 \times L50$ | 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. connectors only 1W CW optical power guarantee.

Drawing:



Ordering Information (Part Number):

| HPICIR- WWWW - P - HH - J - LL - CC | | | | | |
|---|-------------|----------------|----------------------|--------------|-------------|
| WWWW | P | HH | J | LL | CC |
| Wavelength | Port | Handling Power | Fiber Jacket | Fiber Length | Connector |
| 1310 - 1310nm | 3 - 3 Ports | 01 - 1W | B - 250um Bare Fiber | 05 - 0.5m | NE - None |
| 1450 - 1450nm | | 03 - 3W | 9 - 900um Loose Tube | 10 - 1.0m | FA - FC/APC |
| 1480 - 1480nm | | 05 - 5W | | 15 - 1.5m | FU - FC/UPC |
| 1550 - 1550nm | | 10 - 10W | | 20 - 2.0m | SA - SC/APC |
| 1580 - 1580nm | | SS - Specify | | SS - Specify | SU - SU/APC |
| | | | | | LA - LC/APC |
| | | | | LU - LC/UPC | |
| | | | | SS - Specify | |