

1580nm RC80 3-port Polarization Insensitive Optical Circulator

1580nm 3-port RC80 Polarization Insensitive Optical Circulator is a fiber passive component built with RC80 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 WDM System, Fiber Optic Sensor and Coherent Detecting field. High Power type is available upon request.

Application:

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

Features:

Low PDL
High Isolation
Low Insertion Loss
High Reliability



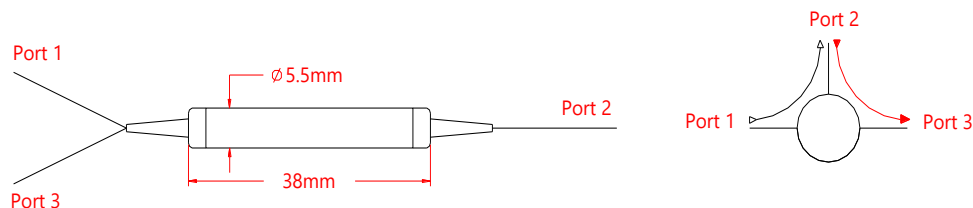
Specification:

| Parameter | Symbol | Value | Unit |
|---|-----------|-----------------------|--------------------|
| Center Wavelength | λ | 1580 | nm |
| Bandwidth | BW | ± 30 | nm |
| Typ. Insertion Loss (Port 1 to 2, 2 to 3) | IL | 0.6 | dB |
| Max. Insertion Loss (Port 1 to 2, 2 to 3) | IL | 0.9 | dB |
| Typ. Isolation (Port 2 to 1, 3 to 2) | Iso | 50 | dB |
| Min. Isolation (Port 2 to 1, 3 to 2) | 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 | | RC80 SMF fiber | - |
| Operating Temperature | T | 0~70 | $^{\circ}\text{C}$ |
| Storage Temperature | T | -40~85 | $^{\circ}\text{C}$ |
| Package Dimension | | $\Phi 5.5 \times L38$ | 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):

RPICIR-**WWW**-**P**-**J**-**LL**-**CC**

| WWW | P | J | LL | CC |
|---------------|-------------|----------------------|--------------|-----------|
| Wavelength | Port | Fiber Jacket | Fiber Length | Connector |
| 1310 - 1310nm | 3 - 3 Ports | B - 165um Bare Fiber | 05 - 0.5m | NE - None |
| 1450 - 1450nm | | | 10 - 1.0m | |
| 1480 - 1480nm | | | 15 - 1.5m | |
| 1550 - 1550nm | | | 20 - 2.0m | |
| 1580 - 1580nm | | | SS - Specify | |