# 2090nm High Power 3-port Optical Circulator

## FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth
- High Optical Power

## APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Laser Systems
- Research Labs

## SPECIFICATIONS

| Parameter | | Unit | Value |
|---|---|---|---|
| Center Wavelength (λc) | | nm | 2090 |
| Bandwidth | | nm | +/-10 |
| Insertion Loss@23°C | (Typ.) | dB | 1.8 |
| | (Max.) | dB | 2.5 |
| Isolation@23°C | (Typ.) | dB | 16 |
| | (Min.) | dB | 14 |
| PDL | | dB | ≤0.2 |
| Optical Return Loss | | dB | ≥45 |
| Cross Talk | | dB | ≥40 |
| Fiber Type | | - | SMF-28 Fiber or SM1950 Fiber (V)<br>10/130um DC Fiber (O) or 25/250um DC Fiber (R) |
| Fiber Tensile Load | | N | 5 |
| Maximum Optical Power (CW) | | W | 1, 2, 3, 4, 5, 8, 10, 20, 30, 40, 50 |
| Operating Temperature | | °C | 0~50 |
| Storage Temperature | | °C | -20~75 |

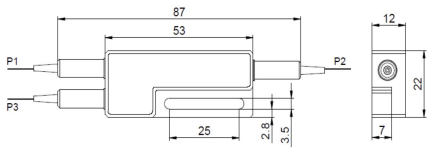
**Note:** 1. Specifications are for device without connectors; Specifications may change without notice.

2. To add connectors, IL is 0.3dB higher, RL is 5dB lower.

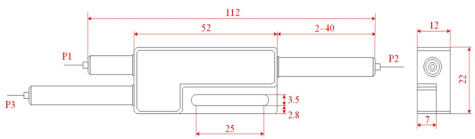
3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.

4. Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

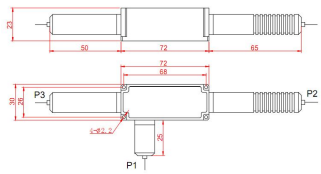
## PACKAGE DIMENSION




≤5W Optical Power




≤20 Optical Power




>20 Optical Power

## ORDERING INFORMATION (PN)

**FCIR- NNNN -3HP N - (C) C NN - CC/CCC**

| Center Wavelength | Optical Power | Fiber Type | Fiber Sleeve | Fiber Length | Connector Type |
|---|---|---|---|---|---|
| 2090=2090nm | 1= 1W | V=SM1950 Fiber | B= Bare fiber | 05=0.5m | N=Without Connector |
| | 2=2W | O=10/130 DC Fiber | L= Loose Tube | 10=1.0m | FC/APC=FC/APC Connector |
| | 5= 5W | R=25/250 DC Fiber | 2= 2mm Cable | 15=1.5m | LC/PC=LC/PC Connector |
| | 10= 10W | *Blank* for SMF-28 Fiber | 3= 3mm Cable | 20=2.0m | SC/UPC=SC/UPC Connector |