

## 1020nm 4-port High Power Optical Circulator

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

### APPLICATIONS

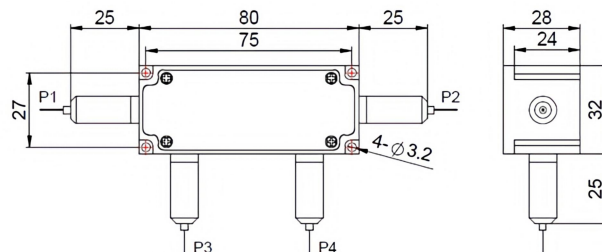
- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- Dispersion Compensation
- Light Routing

### SPECIFICATIONS

| Parameter                        | Unit   | Value                                                                                                                                   |
|----------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Center Wavelength                | nm     | 1020                                                                                                                                    |
| Operating Wavelength Range       | nm     | +/-10                                                                                                                                   |
| Insertion Loss@ 23 °C            | (Typ.) | dB                                                                                                                                      |
|                                  | (Max.) | dB                                                                                                                                      |
| Optical Path                     | C Type | -                                                                                                                                       |
|                                  | D Type | -                                                                                                                                       |
|                                  | E Type | -                                                                                                                                       |
| Isolation @ 23 °C                | (Typ.) | dB                                                                                                                                      |
|                                  | (Min.) | dB                                                                                                                                      |
| Optical Return Loss              | dB     | ≥45                                                                                                                                     |
| Polarization Dependent Loss      | dB     | ≤0.2                                                                                                                                    |
| Fiber Type                       | -      | HI1060 Fiber or 10/125um SC Fiber (E)<br>10/125um DC Fiber (O), 15/130um DC Fiber (W)<br>20/130um DC Fiber (Q) or 25/250um DC Fiber (R) |
| Fiber Tensile Load               | N      | 5                                                                                                                                       |
| Maximum Total Optical Power (CW) | W      | 0.5, 1, 2, 3, 5, 10, 15, 20, 25, 30                                                                                                     |
| Operating Temperature            | °C     | 0~50                                                                                                                                    |
| Storage Temperature              | °C     | -20~75                                                                                                                                  |

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.5dB higher, RL is 5dB lower.
  - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  - 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 size may be different for different optical power, configuration and fiber types.

### DIMENSION DRAWING



### ORDERING INFORMATION (PN)

| FCIR- NNNN        | - (C)            | -4HP NN              | -(NN/NN)            | -( NN)           | -( C)                  | C             | NN           | - CC/CCC                |
|-------------------|------------------|----------------------|---------------------|------------------|------------------------|---------------|--------------|-------------------------|
| Center Wavelength | Optical Path     | Optical Power(Total) | Optical Power P2/P3 | Optical Power P4 | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |
| 1020=1020nm       | D=D Type         | 05=500mW             | 1= 1W               | 1= 1W            | E=10/125 SC Fiber      | B= Bare fiber | 05=0.5m      | N=Without Connector     |
|                   | E=E Type         | 1=1W                 | 2= 2W               | 2= 2W            | Q=20/130 DC Fiber      | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
|                   | Blank for C Type | 5=5W                 | 5=5W                | 5=5W             | R=25/250 DC Fiber      | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
|                   |                  | 20=20W               | Blank for P2/3=P1   | Blank for None   | Blank for HI1060 Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |

