

## 960~1000nm High Power Optical Isolator for Pulse Power

### FEATURES

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

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks

### SPECIFICATIONS

| Parameter                                    | Unit                          | Single Stage   | Dual Stage D Type                              | Dual Stage L Type |
|--|-------------------------------|--|--|-------------------|
| Center Wavelength ( $\lambda_c$ )            | nm                            | 975, 980, 990, 1000  |  |                   |
| Operating Wavelength Range                   | nm                            | +/-10  |  |                   |
| Peak Isolation (Typ.)                        | dB                            | 28   | 46   |                   |
| Min. Isolation (23°C)                        | dB                            | 22   | 40   |                   |
| Typical Insertion Loss ( $\lambda_c$ , 23°C) | dB                            | 0.9  | 1.1  | 1.3               |
| Max. Insertion Loss ( $\lambda_c$ , 23°C)    | dB                            | 1.5  | 1.8  |                   |
| Optical Return Loss (Input/Output)           | dB                            | 50/50  |  |                   |
| Max. Polarization Dependent Loss             | dB                            | 0.15   |  |                   |
| Configuration                                | -                             | Standard: 2-Port; Y Type: 3-Port, Backward Power Guide Out |  |                   |
| Fiber Type                                   | Input&Output                  | -  | HI1060 Fiber or 10/125um SC Fiber (E)          |                   |
|  |                               | -  | 10/125um DC Fiber (O), 15/130um DC Fiber (W)   |                   |
|  | 3 <sup>rd</sup> Port (Y Type) | -  | 20/130um DC Fiber (Q) or 25/250um DC Fiber (R) |                   |
|  |                               | -  | Same Fiber or 105/125um MM Fiber               |                   |
| Fiber Tensile Load                           | N                             | 5  |  |                   |
| Max. Average Optical Power                   | W                             | 0.3, 0.5, 1, 2, 3, 5, 10, 15, 20, 30, 50, 60, 80, 100      |  |                   |
| Max. Peak Power for Pulse                    | kW                            | 0.1, 1, 2, 3, 5, 10, 15, 20                                |  |                   |
| Max. Backward Average Power                  | W                             | 0.3, 0.5, 1, 2, 3, 5, 10                                   |  |                   |
| 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 0.5dB higher, RL is 5dB lower.

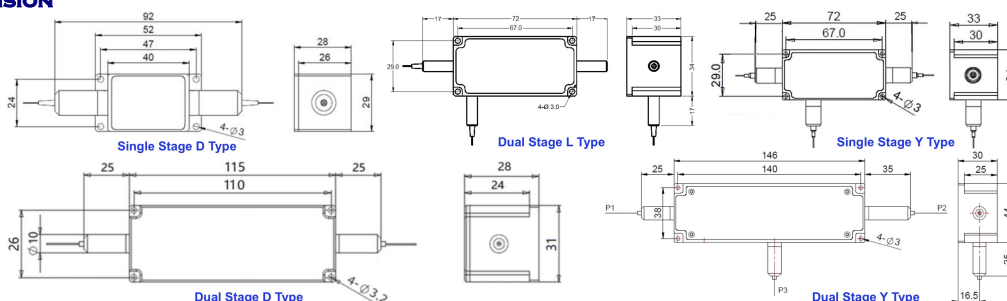
3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.

4. Suggest to use Y type for >20W Optical Power or continuous backward power of  $\geq 500\text{mW}$ .

5. 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.

6. Package dimensions may be different for different fiber type, configuration and optical power.

### PACKAGE DIMENSION



### ORDERING INFORMATION (PN)

| FISO-NNN          | - (C)            | (C)                        | -H NN         | P NN       | - (NN)          | - (C)                  | C             | NN           | -CC/CCC                 |
|-------------------|------------------|----------------------------|---------------|------------|-----------------|------------------------|---------------|--------------|-------------------------|
| Center Wavelength | Stage            | 3 <sup>rd</sup> Port Fiber | Average Power | Peak Power | Backward Power  | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |
| 975-975nm         | D=D Type         | Y= Same Fiber              | 1=1W          | 01=100W    | 05=500mW        | E=10/125um SC Fiber    | B= Bare Fiber | 05=0.5m      | N=Without Connector     |
| 980-980nm         | L=L Type         | A=105/125um Fiber          | 5=5W          | 1=1kW      | 1=1W            | Q=20/130um DC Fiber    | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 990-990nm         | Blank for Single | Blank for Standard         | 10=10W        | 10=10kW    | 10=10W          | R=25/250um DC Fiber    | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
| 1000-1000nm       |                  |                            | 100=100W      | 20=20kW    | Blank for 300mW | Blank for HI1060 Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |

