

1070nm 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

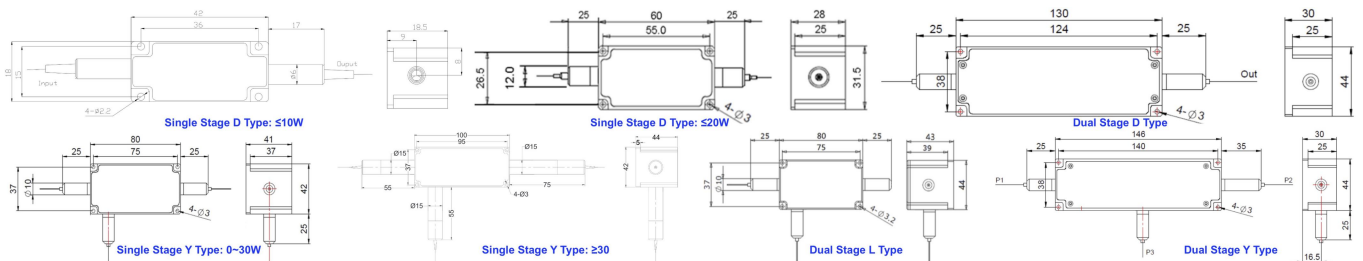


SPECIFICATIONS

| Parameter | Unit | Single Stage | Dual Stage D Type | Dual Stage L Type |
|--|-------------------------------|---|--|-------------------|
| Center Wavelength (λ_c) | nm | 1070 | | |
| Operating Wavelength Range | nm | +/-10 | | |
| Peak Isolation (Typ.) | dB | 28 | 46 | |
| Min. Isolation (23°C) | dB | 22 | 40 | |
| Typical Insertion Loss (λ_c , 23°C) | dB | 0.8 | 1.0 | 1.2 |
| Max. Insertion Loss (λ_c , 23°C) | dB | 1.4 | 1.7 | |
| 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 | - | Standard: HI1060 Fiber or 10/125um SC Fiber (E) | |
| | | - | 10/125um DC Fiber (O), 15/130um DC Fiber (W) | |
| | 3 rd 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, 150, 200 | | |
| 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:**
- 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.
 - Suggest to use Y type for >20W Optical Power or continuous backward power of $\geq 500\text{mW}$.
 - 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 dimensions may be different for different fiber type, configuration and optical power.

PACKAGE DIMENSION



ORDERING INFORMATION (PN)

| FISO-NNNN | -(C) | (C) | -H NN | P NN | -(NN) | -(C) | C | NN | -CC/CCC |
|-------------------|------------------|----------------------------|---------------|------------|-----------------|------------------------|---------------|--------------|-------------------------|
| Center Wavelength | Stage | 3 rd Port Fiber | Average Power | Peak Power | Backward Power | Fiber Type | Fiber Sleeve | Fiber Length | Connector Type |
| 1070-1070nm | 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 |
| | 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 |
| | 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 |
| | | | 100=100W | 20=20kW | Blank for 300mW | Blank for HI1060 Fiber | 3= 3mm Cable | 20=2.0m | SC/UPC=SC/UPC Connector |

