

# 900~960nm Pump Laser Protector with Isolator for Pulse Power

## FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability

## APPLICATIONS

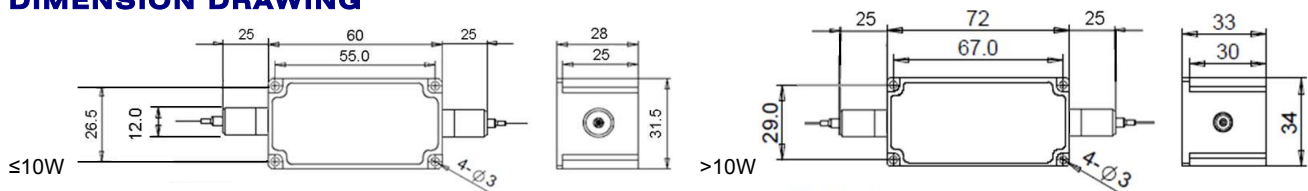
- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks

## SPECIFICATIONS

| Parameters  | Unit     | Standard   | High Signal Isolation |
|---|----------|--|-----------------------|
| Pump Laser Wavelength   | nm       | 915±15, 930±15, 940±15, 950±15   |                       |
| Blocking Signal Wavelength  | Type 6   | 1020~1120  |                       |
|   | Type 4   | 1000~1120  |                       |
|   | Type 5   | 1500~1620  |                       |
|   | Type 2   | 1020~1120&1500~1620  |                       |
| Pump Insertion Loss@23°C  | dB       | ≤1.5   | ≤1.8                  |
| Backward Pump Isolation@23°C  | dB       | ≥22  |                       |
| Backward Signal Attenuation   | dB       | ≥25  | ≥50                   |
| Configuration   | D Type   | 2-port   |                       |
|   | Y/X Type | 3/4-port, (Backward Signal/Pump Guide)   |                       |
| Fiber Type at 3 <sup>rd</sup> /4 <sup>th</sup> Port (Only for Y/X Type) | -        | Same Fiber or 105/125um MM Fiber   |                       |
| Return Loss   | dB       | ≥50  |                       |
| PDL   | dB       | ≤0.2   |                       |
| Fiber Type  | -        | HI780 Fiber, HI1060 Fiber or 10/125um SC Fiber<br>10/125um DC Fiber (O), 15/130um DC Fiber (W)<br>20/130um DC Fiber (Q) or 25/250um DC Fiber |                       |
| Fiber Tensile Load  | N        | 5  |                       |
| Max. Average Power (Pump+Signal)  | W        | 1, 2, 3, 5, 10, 15, 20   |                       |
| Max. Peak Power for Pulse   | kW       | 0.1, 1, 2, 3, 5, 10, 15, 20  |                       |
| Max. Backward Signal/Pump 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 0.7dB 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.
  5. Suggest to use Y/X type if blocked optical power is >1W.

## DIMENSION DRAWING



## ORDERING INFORMATION (PN)

| FSPI- <b>NN</b> -( <b>N</b> ) | ( <b>C</b> )       | <b>C</b>                | ( <b>C</b> )          | - <b>H NN</b>       | <b>P NN</b> -( <b>NN</b> )( <b>NN</b> )-( <b>C</b> ) | <b>C</b>          | <b>NN</b>                          | - <b>CC/CCC</b>       |                     |                       |                         |
|-------------------------------|--------------------|-------------------------|-----------------------|---------------------|--|-------------------|------------------------------------|-----------------------|---------------------|-----------------------|-------------------------|
| <i>CW</i>                     | <i>Signal Type</i> | <i>Signal Isolation</i> | <i>B.Signal Fiber</i> | <i>B.Pump Fiber</i> | <i>Average Power</i>                                 | <i>Peak Power</i> | <i>B.Signal/ Fiber Type</i>        | <i>Fiber Sleeve</i>   | <i>Fiber Length</i> | <i>Connector Type</i> |                         |
| 915= 915nm                    | 4= Type 4          | I=High Isolation        | Y= Same Fiber         | Y= Same Fiber       | 1= 1W  | 01=100W           | <i>B.Pump Power</i> H=HI1060 Fiber | B= Bare fiber         | 05=0.5m             | N=Without Connector   |                         |
| 930= 930nm                    | 5= Type 5          | Blank for Standard      | A=105/125um Fiber     | A=105/125um Fiber   | 5= 5W  | 1= 1kW            | 05= 500mW                          | E=10/125 SC Fiber     | L= Loose Tube       | 10=1.0m               | FC/APC=FC/APC Connector |
| 940= 940nm                    | 2=Type 2           |                         | N=None                | Blank for None      | 10=10W   | 5= 5kW            | 1= 1W                              | R=25/250 DC Fiber     | 2= 2mm Cable        | 15=1.5m               | LC/PC=LC/PC Connector   |
| 950= 950nm                    | Blank for Type 6   |                         |                       |                     | 20=20W   | 20=20kW           | Blank for 300mW                    | Blank for HI780 Fiber | 3= 3mm Cable        | 20=2.0m               | SC/UPC=SC/UPC Connector |