

## 900~960nm PM Pump Laser Protector with Isolator

### FEATURES

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

### APPLICATIONS

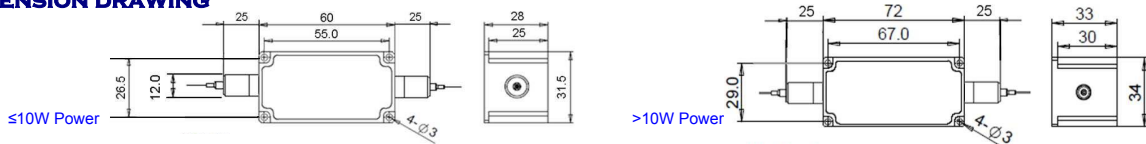
- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks

### SPECIFICATIONS

| Parameters                           | Unit                                   | Standard                         | High Signal Isolation                                                                                                                                   |
|--------------------------------------|----------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pump Laser Wavelength                | nm                                     | 915±15, 930±15, 940±15, 950±15   |                                                                                                                                                         |
| Blocking Signal Wavelength           | Type 6                                 | nm                               | 1020~1120                                                                                                                                               |
|                                      | Type 4                                 | nm                               | 1000~1120                                                                                                                                               |
|                                      | Type 5                                 | nm                               | 1500~1620                                                                                                                                               |
|                                      | Type 2                                 | nm                               | 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                              | ≥45                                                                                                                                                     |
| Configuration                        | D Type                                 | -                                | 2-port                                                                                                                                                  |
|                                      | Y Type                                 | -                                | 3-port, (Backward Signal/Pump Guide Out)                                                                                                                |
| Work Mode                            | S Type                                 | -                                | Can only work in Slow Axis                                                                                                                              |
|                                      | F Type                                 | -                                | Can work both in Slow Axis and Fast Axis                                                                                                                |
| Return Loss                          | dB                                     | ≥50                              |                                                                                                                                                         |
| Extinction Ratio                     | dB                                     | ≥18                              |                                                                                                                                                         |
| Fiber Type                           | Input&Output                           | -                                | PM850 Fiber, PM980 Fiber or PM1060L Fiber (E)<br>10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W)<br>20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R) |
|                                      | 3 <sup>rd</sup> Port (Only for Y Type) | -                                | Same Fiber, Corr. SM Fiber or 105/125um MM Fiber                                                                                                        |
| Fiber Tensile Load                   | N                                      | 5                                |                                                                                                                                                         |
| Max. Optical Power (Pump+Signal, CW) | W                                      | 0.3, 0.5, 1, 2, 3, 5, 10, 15, 20 |                                                                                                                                                         |
| Max. Backward Signal/Pump Power (CW) | 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 0.7dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  - 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.
  - Suggest to use Y/X type if blocked optical power is >1W.
  - Package size may be different for different optical power, fiber type and configurations.

### DIMENSION DRAWING



### ORDERING INFORMATION (PN)

| FSRI- <b>NN-C</b> | ( <b>N</b> )     | ( <b>C</b> )       | ( <b>C</b> )            | ( <b>C</b> )          | - <b>P NN</b>           | -( <b>NN</b> )       | - <b>C</b>                 | <b>C</b>            | <b>NN</b>           | - <b>CC/CCC</b>     |                         |
|-------------------|------------------|--------------------|-------------------------|-----------------------|-------------------------|----------------------|----------------------------|---------------------|---------------------|---------------------|-------------------------|
| <i>CW</i>         | <i>Word Mode</i> | <i>Signal Type</i> | <i>Signal Isolation</i> | <i>B.Signal Fiber</i> | <i>B.Pump Guide Out</i> | <i>Optical Power</i> | <i>B.Signal/Pump Power</i> | <i>Fiber Type</i>   | <i>Fiber Sleeve</i> | <i>Fiber Length</i> | <i>Connector Type</i>   |
| 915-915nm         | S= S Type        | 4= Type 4          | I=High Isolation        | Y= Same Fiber         | P= Yes                  | 05=500mW             | 05= 500mW                  | 2=PM850 Fiber       | B= Bare fiber       | 05=0.5m             | N=Without Connector     |
| 930-930nm         | F= F Type        | 5= Type 5          | Blank for Standard      | S=Corr. SM Fiber      | Blank for               | 1= 1W                | 1= 1W                      | H=PM980 Fiber       | L= Loose Tube       | 10=1.0m             | FC/APC=FC/APC Connector |
| 940-940nm         |                  | 2=Type 2           |                         | A=105/125um Fiber     | D Type or No            | 5= 5W                | 5= 5W                      | E=PM1060L Fiber     | 2= 2mm Cable        | 15=1.5m             | LC/PC=LC/PC Connector   |
| 950-950nm         |                  | Blank for Type 6   |                         | Blank for D Type      |                         | 10=10W               | Blank for 300mW            | R=25/250 PMDC Fiber | 3= 3mm Cable        | 20=2.0m             | SC/UPC=SC/UPC Connector |

