

## 750~860nm PM Pump Laser Protector

### 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 ER Type |
|--------------------------------------|--|---|--------------|
| Pump Laser Center Wavelength         | nm                                     | 750, 780, 793, 808, 830, 850  |              |
| Pump Laser Bandwidth                 | nm                                     | +/-10   |              |
| Blocking Signal Wavelength           | Type 5                                 | 1500~1620   |              |
|                                      | Type 2                                 | 1020~1120&1500~1620   |              |
|                                      | Type 8                                 | 880~1100  |              |
|                                      | Type 9                                 | 1900~2070   |              |
| Pump Insertion Loss                  | Typ.                                   | 0.9   | 1.0          |
|                                      | Max.                                   | 1.8   |              |
| Backward Signal Attenuation          | Standard                               | ≥25   |              |
|                                      | High Isolation                         | ≥50   |              |
| Configuration                        | D Type                                 | 2-port  |              |
|                                      | Y Type                                 | 3-port, (Backward Power Guide Out)  |              |
| Return Loss                          | dB                                     | ≥50   |              |
| Extinction Ratio                     | dB                                     | ≥18   | ≥20          |
| Fiber Type                           | Input & Output                         | PM850 Fiber or PM780-HP Fiber   |              |
|                                      | 3 <sup>rd</sup> Port (Only for Y Type) | Same Fiber, Corr. SM Fiber or 50/125um 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. Signal Power (CW)               | W                                      | 0.3, 0.5, 1, 2, 3, 5, 10  |              |
| Operating Temperature                | °C                                     | 0~50  |              |
| Storage Temperature                  | °C                                     | -40~85  |              |
| Package Dimension                    | Stainless Steel Tube (SST)             | ∅5.5x <sup>L</sup> 35 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)  |              |
|                                      | Metal Box                              | <sup>L</sup> 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); <sup>L</sup> 120x <sup>W</sup> 12x <sup>H</sup> 10 (≤10W) |              |

- 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, ER is 2dB Lower, Connector key is aligned to slow axis.
  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.
  5. High ER type can only work in slow axis; Suggest to use Y type if blocked optical power is >1W.
  6. Package size may be different for different optical power, fiber type and configurations.

### ORDERING INFORMATION (PN)

| FSPR-NNN          | (C)                | -N       | (C)                | (C)              | -P NN         | -(NN)           | -(C)          | N                | C             | NN           | -CC/CCC                 |
|-------------------|--------------------|----------|--------------------|------------------|---------------|-----------------|---------------|------------------|---------------|--------------|-------------------------|
| Center Wavelength | Type               | Type     | Isolation          | 3rd Port Fiber   | Optical Power | Signal Power    | Package       | Fiber Type       | Fiber Sleeve  | Fiber Length | Connector Type          |
| 780~780nm         | R=High ER          | 5=Type 5 | I=High Isolation   | Y= Same Fiber    | 03=300mW      | 05=500mW        | M=Metal Box   | 2= PM850 Fiber   | B= Bare fiber | 05=0.5m      | N=Without Connector     |
| 793~793nm         | Blank for Standard | 9=Type 9 | Blank for Standard | S=Corr. SM Fiber | 1= 1W         | 1= 1W           | Blank for SST | 7= PM780HP Fiber | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 808~ 808nm        |                    | 8=Type 8 |                    | S=50/125um Fiber | 5= 5W         | 5= 5W           | or >10W       |                  | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
| 830~ 830nm        |                    | 2=Type 2 |                    | Blank for D Type | 10=10W        | Blank for 300mW |               |                  | 3= 3mm Cable  | 20=2.0m      | SC/APC=SC/APC Connector |

