

## 750~850/1310~1650nm High Power PM WDM

### FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth
- High Optical Power

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Laser Systems
- Research Labs



### SPECIFICATIONS

| Parameters                                      |                                 | Unit         | Standard  | High Isolation |
|---|---------------------------------|--------------|---|----------------|
| Pass Channel Wavelength Range $\lambda_1$       |                                 | nm           | 750 $\pm$ 10, 780 $\pm$ 10, 793 $\pm$ 10, 810 $\pm$ 10, 830 $\pm$ 10, 850 $\pm$ 10, |                |
| Reflective Channel Wavelength Range $\lambda_2$ |                                 | nm           | 1310 $\pm$ 20, 1550 $\pm$ 20, 1590 $\pm$ 20, 1625 $\pm$ 20, 1650 $\pm$ 10           |                |
| Insertion Loss                                  | Pass Channel@ $\lambda_1$       | dB           | $\leq$ 1.8  | $\leq$ 2.0     |
|   | Reflective Channel@ $\lambda_2$ | dB           | $\leq$ 1.8  |                |
| Configuration                                   | Y Type                          | -            | 3-port  |                |
|   | X Type                          | -            | 4-port (2x2 WDM)  |                |
| Isolation                                       | Pass Channel@ $\lambda_2$       | dB           | $\geq$ 12   |                |
|   | Reflective Channel@ $\lambda_1$ | dB           | $\geq$ 25   | $\geq$ 45      |
| Optical Return Loss                             |                                 | dB           | $\geq$ 50   |                |
| Extinction Ratio                                | Standard                        | dB           | $\geq$ 18   |                |
|   | High ER Type                    | dB           | $\geq$ 20   |                |
| Fiber Type                                      | Signal                          | -            | PM1310/1550 Panda Fiber or 10/125um PMDC Fiber (O)                                  |                |
|   |                                 | -            | 12/130um PMDC Fiber (T) or 20/130um PMDC Fiber (Q)                                  |                |
|   |                                 | -            | 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)                                  |                |
|   | Common                          | -            | Same Fiber, PM850 Fiber (2) or PM780HP Fiber (8)                                    |                |
| Pump (750-850nm)                                |                                 | -            | Same Fiber, PM850 Fiber (P) or PM780HP Fiber (7)                                    |                |
|   |                                 | -            | Corr. SM Fiber, HI780 Fiber (H) or 780-HP Fiber (M)                                 |                |
| Fiber Tensile Load                              |                                 | N            | 5   |                |
| Max. Optical Power (CW)                         |                                 | mW           | 300   |                |
| Operating Temperature                           |                                 | $^{\circ}$ C | 0~50  |                |
| Storage Temperature                             |                                 | $^{\circ}$ C | -40~85  |                |
| Package   | Stainless Steel Tube (SST)      | mm           | $\varnothing$ 5.5xL35   |                |
| Dimension                                       | Metal Box                       | mm           | L120x <sup>W</sup> 12x <sup>H</sup> 10  |                |

- 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.
  - High ER type can only work in slow axis at pass port.
  - 750~850nm light will transmit as low order modes in PM1310/1550 and LMA fiber.

### ORDERING INFORMATION (PN)

| FPWM-NN        | NN              | -C                | (C)               | (C)             | C           | (C)         | -(C)          | C                   | C             | NN           | -CC/CCC                 |
|----------------|-----------------|-------------------|-------------------|-----------------|-------------|-------------|---------------|---------------------|---------------|--------------|-------------------------|
| Ref Wavelength | Pass Wavelength | Pump Fiber        | Pump Fiber2       | Comm Fiber      | Type        | Isolation   | Package       | Fiber Type          | Fiber Sleeve  | Fiber Length | Connector Type          |
| 79~793nm       | 15~1550nm       | Y= Same Fiber     | X= Same Fiber     | 8=PM780HP Fiber | H= High ER  | I= High Iso | M= Metal Box  | 2=PM1310/1550 Fiber | B= Bare Fiber | 05=0.5m      | N=Without Connector     |
| 83~830nm       | 59~1590nm       | S= Corr. SM Fiber | S= Corr. SM Fiber | 2=PM850 Fiber   | S= Standard | Blank for   | Blank for SST | E=10/125 PMDC Fiber | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 13~1310nm      | 78~780nm        | H=HI780 Fiber     | P=PM850 Fiber     | Blank for       |             | Standard    |               | T=12/130 PMDC Fiber | 2=2mm Cable   | 15=1.5m      | LC/PC=LC/PC Connector   |
| 15~1550nm      | 85~850nm        | 7=PM780HP Fiber   | Blank for Y Type  | Same Fiber      |             |             |               | R=25/250 PMDC Fiber | 3=3mm Cable   | 20=2.0m      | SC/UFC=SC/UFC Connector |

