

# 1310/1490/1550nm PM WDM Filter 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**

| Parameters                             |                            | Unit                        | Standard  | High ER Type      |  |  |
|--|----------------------------|-----------------------------|---|-------------------|--|--|
| Pass Channel Wavelength Range λ1       |                            | nm                          | 1310±30 & 1490±10                                 |                   |  |  |
| Reflective Channel Wavelength Range λ2 |                            | nm                          | 1530~1570   |                   |  |  |
| Insertion Loss over λ1                 | L @ Pass Channel           | dB                          | ≤1.0  | ≤1.2              |  |  |
| Insertion Loss overλ2                  | dB                         | ≤0.8                        |   |                   |  |  |
| Configuration                          | Y Type                     | -                           | 3-port  |                   |  |  |
|  | X Type                     | -                           | 4-port (2x2 WDM)                                  |                   |  |  |
| Isolation over λ1 @ R                  | eflective Channel          | dB                          | ≥12   |                   |  |  |
| Isolation over λ2 @ Pa                 | dB                         | ≥25                         |   |                   |  |  |
| Optical Return Loss                    |                            | dB                          | ≥50   |                   |  |  |
| Extinction Ratio                       |                            | dB                          | ≥18   | ≥20               |  |  |
|  |                            |                             | PM1310 Panda Fiber, 10/125um PMDC Fiber (O),      |                   |  |  |
| Fiber Type                             |                            | -                           | 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  |                   |  |  |
|  |                            |                             | 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)  |                   |  |  |
| Polarization Alignmen                  | -                          | Slow Axis                   |   |                   |  |  |
| Fiber Tensile Load                     | N                          | 5                           |   |                   |  |  |
| Max. Average Optical Power             |                            | W                           | 0.3, 0.5, 1, 2, 3, 5, 10, 15, 20                  |                   |  |  |
| Max. Peak Power for p                  | kW                         | 0.1, 1, 2, 3, 5, 10, 15, 20 |   |                   |  |  |
| Operating Temperatur                   | °C                         | 0~70                        |   |                   |  |  |
| Storage Temperature                    | °C                         | -40~85                      |   |                   |  |  |
| Package Dimension                      | Stainless Steel Tube (SST) | mm                          | (Ø)5.5x35 (≤5W);                                  | (Ø)6.0x48 (5~10W) |  |  |
|  | Metal Box                  | mm                          | (L)90x(W)18x(H)10 (>10W); (L)120x(W)12x(H)10 (≤10 |                   |  |  |

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

- 2. To add connectors, IL is 0.3dB 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; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.
  - 5. High ER type can only work in slow axis at pass port.

## **ORDERING INFORMATION (PN)**

| FPWM-NN                 | NN                     | - (C)                   | (C) -            | H NN          | P NN                  | - (C)                | С                           | С             | NN ·                  | CC/CCC                  |
|-------------------------|------------------------|-------------------------|------------------|---------------|-----------------------|----------------------|-----------------------------|---------------|-----------------------|-------------------------|
| Ref Wavelength          | Pass Wavelength        | Configuration           | Туре             | Average Power | Peak Power            | Package              | Fiber Type                  | Fiber Sleeve  | Fiber Length          | Connector Type          |
| 13- 1310nm              | <b>34=</b> 1310+1490nm | X= X Type               | H= High ER       | 03=300mW      | <mark>01</mark> =100W | M=Metal Box          | 2=PM1310 Fiber              | B= Bare Fiber | <mark>05=</mark> 0.5m | N=Without Connector     |
| <mark>15=</mark> 1550nm | <b>45=</b> 1490+1550nm | <i>Blank</i> for Y Type | <i>Blank</i> for | 1= 1W         | 1= 1kW                | <i>Blank</i> for SST | <b>0=</b> 10/125 PMDC Fiber | L= Loose Tube | <mark>10</mark> =1.0m | FC/APC=FC/APC Connector |
| 34=1310+1490nm          | 15= 1550nm             |                         | Standard         | 10-10W        | 10-10kW               | or >10W              | T=12/130 PMDC Fiber         | 2=2mm Cable   | <mark>15=</mark> 1.5m | LC/PC =LC/PC Connector  |
| 45=1490+1550nm          | 13= 1310nm             |                         |                  | 20-20W        | 20=20kW               |                      | R=25/250 PMDC Fiber         | 3=3mm Cable   | 20=2.0m               | SC/UPC=SC/UPC Connector |



