

## 1018nm High Power Bandpass Filter

### FEATURES

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

### APPLICATIONS

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



### SPECIFICATIONS

| Parameters                               |                            | Unit                                           | Value                                                                                                                     |
|------------------------------------------|----------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Center Wavelength                        |                            | nm                                             | 1018                                                                                                                      |
| Min. Pass Band Width @ 0.5dB             |                            | nm                                             | 2.0, 9.5                                                                                                                  |
| Insertion Loss over Pass Band Wavelength |                            | dB                                             | ≤1.2                                                                                                                      |
| Stop wavelength (ASE)                    | 2nm Bandwidth              | nm                                             | 960~1014&1022~1100                                                                                                        |
|                                          | 9.5nm Bandwidth            | nm                                             | 960~1008&1028~1100                                                                                                        |
| Stop Wavelength                          | Standard                   | dB                                             | ≥20                                                                                                                       |
| (ASE) Isolation                          | High Isolation             | dB                                             | ≥38                                                                                                                       |
| ASE Direction                            |                            | -                                              | F: Forward, B: Backward, T: Two-way                                                                                       |
| Configuration                            |                            | -                                              | D: 2-port, Y: 3-port, X: 4-port                                                                                           |
| Optical Return Loss                      |                            | dB                                             | ≥50                                                                                                                       |
| Polarization Dependent Loss              |                            | dB                                             | ≤0.15                                                                                                                     |
| Fiber Type                               | Input&Output               | -                                              | HI1060 Fiber or 10/125um SC Fiber (E)                                                                                     |
|                                          |                            | -                                              | 10/125um DC Fiber (O), 15/130um DC Fiber (W)                                                                              |
|                                          | -                          | 20/130um DC Fiber (Q) or 25/250um DC Fiber (R) |                                                                                                                           |
|                                          | ASE Guide Out (Y/X Type)   | -                                              | Same Fiber or MM Fiber                                                                                                    |
| Fiber Tensile Load                       |                            | N                                              | 5                                                                                                                         |
| Max. Optical Power (CW, ASE+Signal)      |                            | W                                              | 1, 2, 3, 5, 10, 15, 20, 30, 40, 50, 60, 80, 100                                                                           |
| Max. ASE Optical Power (CW)              |                            | W                                              | 0.3, 0.5, 1, 2, 3, 4, 5, 10                                                                                               |
| Operating Temperature                    |                            | °C                                             | 0~50                                                                                                                      |
| Storage Temperature                      |                            | °C                                             | -40~85                                                                                                                    |
| Package Dimension                        | Stainless Steel Tube (SST) | mm                                             | ∅5.5x <sup>L</sup> 38 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)                                                                |
|                                          | Metal Box                  | mm                                             | H: <sup>L</sup> 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); M: <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 0.5dB higher, RL is 5dB lower.

3. Suggest to use Y/X type or H Box if blocked optical power is ≥1W.

4. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.

5. 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.

6 Package size may be different for different optical power and configurations.

### ORDERING INFORMATION (PN)

**FFBP-1018-NN(C)(C)**
**(C)**
**(C) - HP NN**
**-(NN)**
**-(C)**
**(C)**
**C**
**NN**
**-CC/CCC**

| Bandwidth | ASE Type          | ASE Iso   | Fwd ASE Fiber     | Bwd ASE Fiber            | Optical Power | ASE Power       | Package       | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |
|-----------|-------------------|-----------|-------------------|--------------------------|---------------|-----------------|---------------|------------------------|---------------|--------------|-------------------------|
| 20~2nm    | B=Backward        | I=High    | Y=Same Fiber      | Y=Same Fiber             | 1~1W          | 1~1W            | M=Metal Box   | E=10/125 SC Fiber      | B= Bare fiber | 0.5~0.5m     | N=Without Connector     |
| 9.5~9.5nm | T=Two-way         | Isolation | A=105/125um Fiber | A=105/125um Fiber        | 5~5W          | 5~5W            | H=H Box       | Q=20/130 DC Fiber      | L= Loose Tube | 10~1.0m      | FC/APC=FC/APC Connector |
|           | Blank for Forward | Blank for | N=None            | S=50/125um Fiber         | 10~10W        | 10~10W          | Blank for SST | R=25/250 DC Fiber      | 2= 2mm Cable  | 15~1.5m      | LC/PC=LC/PC Connector   |
|           |                   | Standard  | Blank for D Type  | Blank for None or D Type | 20~20W        | Blank for 300mW |               | Blank for HI1060 Fiber | 3= 3mm Cable  | 20~2.0m      | SC/UPC=SC/UPC Connector |

