

## 1544nm 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
- ▣ Laser Systems
- ▣ Research Labs



### SPECIFICATIONS

| Parameters                               | Unit                       | Value                               |  |
|--|----------------------------|-------------------------------------|--|
| Center Wavelength                        | nm                         | 1544                                |  |
| Min. Pass Band Width @ 0.5dB             | nm                         | 0.12, 0.3, 0.7, 8.0                 |  |
| Insertion Loss over Pass Band Wavelength | dB                         | ≤1.2                                |  |
| Stop Wavelength (ASE)                    | 0.12nm Bandwidth           | nm                                  | 1500~1543.4 & 1544.6-1600  |
|  | 0.3nm Bandwidth            | nm                                  | 1500~1543 & 1545-1600  |
|  | 0.7nm Bandwidth            | nm                                  | 1500~1542.5 & 1545.5-1600  |
|  | 8nm Bandwidth              | nm                                  | 1500~1536 & 1552-1600  |
| Stop Wavelength (ASE)                    | Standard                   | dB                                  | ≥25  |
| Isolation                                | High Isolation             | dB                                  | ≥45  |
| 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               | -                                   | SMF-28 Fiber or 10/130um DC Fiber NA=0.08 (O)<br>10/130um DC Fiber NA=0.15 (O2) or 12/130um DC Fiber (T)<br>25/250um DC Fiber (R) or 25/300um DC Fiber (G) |
|  | ASE Guide Out (Y/X Type)   | -                                   | Same Fiber or MM Fiber   |
| Fiber Tensile Load                       | N                          | 5                                   |  |
| Max. Optical Power (CW, ASE+Signal)      | mW                         | 300                                 |  |
| Operating Temperature                    | °C                         | 0~70                                |  |
| Storage Temperature                      | °C                         | -40~85                              |  |
| Package Dimension                        | Stainless Steel Tube (SST) | mm                                  | ∅5.5xL35   |
|  | Metal Box                  | mm                                  | L120x <sup>W</sup> 12x <sup>H</sup> 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.
  3. 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.
  - 4 Package size may be different for different optical power and configurations.

### ORDERING INFORMATION (PN)

| FFBP-1544-NN(C) | (C)               | (C)       | (C)               | - (C)                    | (C)           | C                      | NN            | -CC/CCC      |                         |
|-----------------|-------------------|-----------|-------------------|--------------------------|---------------|------------------------|---------------|--------------|-------------------------|
| Bandwidth       | ASE Type          | ASE Iso   | Fwd ASE Fiber     | Bwd ASE Fiber            | Package       | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |
| 012=0.12nm      | B=Backward        | I=High    | Y=Same Fiber      | Y=Same Fiber             | M=Metal Box   | O=10/130 DC Fiber      | B= Bare fiber | 05=0.5m      | N=Without Connector     |
| 03=0.3nm        | T=Two-way         | Isolation | A=105/125um Fiber | A=105/125um Fiber        | Blank for SST | T=12/130 DC Fiber      | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 07=0.7nm        | Blank for Forward | Blank for | N=None            | 5=50/125um Fiber         |               | G=25/300 DC Fiber      | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
| 80=8nm          |                   | Standard  | Blank for D Type  | Blank for None or D Type |               | Blank for SMF-28 Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |