

1540nm Bandpass Filter for Pulse Power

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 | 1540 | |
| Min. Pass Band Width @ 0.5dB | nm | 0.12, 0.3, 0.7, 2.5, 5.0, 7.0, 10.0, 15.0 | |
| Insertion Loss over Pass Band Wavelength | dB | ≤1.2 | |
| Stop Wavelength (ASE) | 0.12nm Bandwidth | nm | 1510~1539.4 & 1540.6~1600 |
| | 0.3nm Bandwidth | nm | 1510~1539 & 1541~1600 |
| | 0.7nm Bandwidth | nm | 1510~1538.5 & 1541.5~1600 |
| | 2.5nm Bandwidth | nm | 1510~1537 & 1543~1600 |
| | 5nm Bandwidth | nm | 1510~1535 & 1545~1600 |
| | 7nm Bandwidth | nm | 1510~1533 & 1547~1600 |
| | 10nm Bandwidth | nm | 1510~1530 & 1550~1600 |
| 15nm Bandwidth | nm | 1510~1527 & 1553~1600 | |
| 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) 10/130um DC Fiber NA=0.15 (O2) or 12/130um DC Fiber (T) 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. Average Optical Power (ASE+Signal) | | W | 0.3, 0.5, 1, 2, 3, 5, 10, 15, 20, 30, 50, 60, 80, 100 |
| Max. Peak Power for pulse | | kW | 0.1, 1, 2, 3, 5, 10, 15, 20 |
| Max. ASE Average Power | | W | 0.3, 0.5, 1, 2, 3, 4, 5, 10 |
| Operating Temperature | | °C | 0~70 |
| Storage Temperature | | °C | -40~85 |
| Package Dimension | Stainless Steel Tube (SST) | mm | ∅5.5x ^L 35 (≤5W); ∅6.0x ^L 50 (5~10W) |
| | Metal Box | mm | H: ^L 90x ^W 12x ^H 10 (>10W); M: ^L 120x ^W 12x ^H 10 (≤10W) |

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
 - To add connectors, IL is 0.3dB higher, RL is 5dB lower.
 - Suggest to use Y/X type or H Box if blocked optical power is ≥1W.
 - 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.
 - Package size may be different for different optical power and configurations.

ORDERING INFORMATION (PN)

FFBP-1540-**NN(C)** (**C**)- (**C**) (**C**) - **H NN P NN** -(**NN**) -(**C**) (**C**) **C** **NN** -**CC/CCC**

| Bandwidth | ASE Type | ASE Iso | Fwd ASE Fiber | Bwd ASE Fiber | Average Power | Peak Power | ASE Power | Package | Fiber Type | Fiber Sleeve | Fiber Length | Connector Type |
|-----------|-------------------|-----------|-------------------|--------------------------|---------------|------------|-----------------|---------------|------------------------|---------------|--------------|-------------------------|
| 03-0.3nm | B=Backward | I=High | Y=Same Fiber | Y=Same Fiber | 03-300mW | 01-100W | 1-1W | M=Metal Box | O=10/130 DC Fiber | B= Bare fiber | 05-0.5m | N=Without Connector |
| 50-5nm | T=Two-way | Isolation | A=105/125um Fiber | A=105/125um Fiber | 1-1W | 1-1kW | 5-5W | H=H Box | T=12/130 DC Fiber | L= Loose Tube | 10-1.0m | FC/APC=FC/APC Connector |
| 100-10nm | Blank for Forward | Blank for | N=None | 5=50/125um Fiber | 5-5W | 10-10kW | 10-10W | Blank for SST | G=25/300 DC Fiber | 2- 2mm Cable | 15-1.5m | LC/PC=LC/PC Connector |
| 150-15nm | | Standard | Blank for D Type | Blank for None or D Type | 20-20W | 20-20kW | Blank for 300mW | | Blank for SMF-28 Fiber | 3- 3mm Cable | 20-2.0m | SC/APC=SC/APC Connector |

