

## 1550nm High Power Multimode Bandpass Filter (≥8nm BW)



### 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                         | 1550                                 |   |
| Min. Pass Band Width @ 0.5dB             | nm                         | 8.0, 11, 13, 16, 22, 27, 50, 75, 100 |   |
| Insertion Loss over Pass Band Wavelength | dB                         | ≤1.2                                 |   |
| Stop Wavelength (ASE)                    | 8nm Bandwidth              | nm                                   | 1520~1542 & 1558~1610   |
|  | 11nm Bandwidth             | nm                                   | 1520~1541 & 1559~1610   |
|  | 13nm Bandwidth             | nm                                   | 1520~1540 & 1560~1610   |
|  | 16nm Bandwidth             | nm                                   | 1500~1537 & 1563~1610   |
|  | 22nm Bandwidth             | nm                                   | 1500~1533 & 1567~1610   |
|  | 27nm Bandwidth             | nm                                   | 1500~1528 & 1572~1610   |
|  | 50nm Bandwidth             | nm                                   | 1500~1520 & 1580~1610   |
|  | 75nm Bandwidth             | nm                                   | 1450~1500 & 1600~1650   |
| 100nm Bandwidth                          | nm                         | 1440~1490 & 1610~1660                |   |
| 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                                   | ≥30   |
| Fiber Type                               | Input&Output               | -                                    | 50/125um (OM2) or 62.5/125um (OM1) MM Fiber<br>50/125um OM3 MM Fiber (3) or OM4 MM Fiber(4)<br>105/125um MM Fiber, NA=0.12(D), 0.15(B), 0.22(A) |
|  | ASE Guide Out (Y/X Type)   | -                                    | Same 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                                   | 0~70  |
| Storage Temperature                      |                            | °C                                   | -40~85  |
| Package Dimension                        | Stainless Steel Tube (SST) | mm                                   | ∅5.5x <sup>L</sup> 35 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)  |
|  | Metal Box                  | mm                                   | H: 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); M: 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 0.3dB higher, RL is 10dB lower.
  3. Specifications are tested at low order modes.
  4. Suggest to use Y/X type or H Box if blocked optical power is ≥1W.
  5. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  6. Devices for higher optical power or with other type fiber or consigned fiber are also available.
  7. Package size may be different for different optical power and configurations.

### ORDERING INFORMATION (PN)

| Bandwidth  | ASE Type          | ASE Iso   | Fwd ASE Fiber    | Bwd ASE Fiber            | Optical Power | ASE Power       | Package       | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |
|------------|-------------------|-----------|------------------|--------------------------|---------------|-----------------|---------------|------------------------|---------------|--------------|-------------------------|
| 80=8nm     | B=Backward        | I=High    | Y=Same Fiber     | Y=Same Fiber             | 1=1W          | 1=1W            | M=Metal Box   | 5= 50/125um MM Fiber   | B= Bare fiber | 05=0.5m      | N=Without Connector     |
| 110=11nm   | T=Two-way         | Isolation | N=None           | Blank for None or D Type | 5=5W          | 5=5W            | H=H Box       | 6= 62.5/125um MM Fiber | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 220=22nm   | Blank for Forward | Blank for | Blank for D Type |                          | 10=10W        | 10=10W          | Blank for SST | 3= OM3 MM Fiber        | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
| 1000=100nm |                   | Standard  |                  |                          | 20=20W        | Blank for 300mW |               | A= 105/125um, NA=0.22  | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |