

1590nm High Power PM 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 | Standard | High ER Type |
|--|----------------------------|---|--|
| Center Wavelength | nm | 1590 | |
| Min. Pass Band Width @ 0.5dB | nm | 0.3, 0.7, 1.3 | |
| Insertion Loss over Pass Band Wavelength | dB | ≤1.0 | ≤1.2 |
| Stop Wavelength (ASE) | 0.3nm Bandwidth | nm | 1530~1589 & 1591~1630 |
| | 0.7nm Bandwidth | nm | 1530~1588.5 & 1591.5~1630 |
| | 1.3nm Bandwidth | nm | 1530~1587.5 & 1592.5~1630 |
| 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 | |
| Extinction Ratio | dB | ≥18 | ≥20 |
| Fiber Type | Input&Output | - | PM1550 Panda Fiber or 10/125um PMDC Fiber NA=0.08 (O) 10/130um PMDC Fiber NA=0.15 (O2) or 12/130um PMDC Fiber (T) 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G) |
| | ASE Guide Out (Y/X Type) | - | Same Fiber, Corr. SM 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 | 0~70 | |
| Storage Temperature | °C | -40~85 | |
| Package Dimension | Stainless Steel Tube (SST) | mm | ∅5.5x ^L 38 (≤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, ER is 2dB Lower, Connector key is aligned to slow axis.
 - High ER type can only work in slow axis; 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)

| Bandwidth | Type | ASE Type | ASE Iso | Fwd ASE Fiber | Rev ASE Fiber | Optical Power | ASE Power | Package | Fiber Type | Fiber Sleeve | Fiber Length | Connector Type |
|-----------|-----------|-------------------|------------------|--------------------------|-------------------|---------------|-----------------|---------------|---------------------|---------------|--------------|-------------------------|
| 0.3-0.3nm | R-High ER | B-Backward | I-High | Y-Same Fiber | Y-Same Fiber | 1-1W | 1-1W | M-Metal Box | 2-PM1550Fiber | B- Bare fiber | 0.5-0.5m | N-Without Connector |
| 0.7-0.7nm | Blank for | T=Two-way | Isolation | S-Corr. SM Fiber | S-Corr. SM Fiber | 5-5W | 5-5W | H-H Box | 0-10/125 PMDC Fiber | L- Loose Tube | 10-1.0m | FC/APC=FC/APC Connector |
| 1.3-1.3nm | Standard | Blank for Forward | Blank for | N=None | A=105/125um Fiber | 10-10W | 10-10W | Blank for SST | T=12/130 PMDC 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 | | G=25/300 PMDC Fiber | 3- 3mm Cable | 20-2.0m | SC/UPC=SC/UPC Connector |