

## 1029nm 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                         | 1029                                |  |
| Min. Pass Band Width @ 0.5dB             | nm                         | 1.0                                 |  |
| Insertion Loss over Pass Band Wavelength | dB                         | ≤1.2                                | ≤1.4   |
| Stop Wavelength (ASE)                    | nm                         | 950~1026.5&1031.5~1100              |  |
| 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               | -                                   | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L)<br>10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W)<br>20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R) |
|  | 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              |  |
| 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> 35 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)   |
|  | Metal Box                  | mm                                  | <sup>L</sup> 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); <sup>L</sup> 120x <sup>W</sup> 12x <sup>H</sup> 10 (≤10W)  |

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.5dB 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)

| FPBP-1029-NN(C)(C) | (C)       | (C)               | (C)       | - HPNN           | -(NN)                    | -(C)          | C               | C             | NN                  | -CC/CCC       |              |                         |
|--------------------|-----------|-------------------|-----------|------------------|--------------------------|---------------|-----------------|---------------|---------------------|---------------|--------------|-------------------------|
| Bandwidth          | Type      | ASE Type          | ASE Iso   | Fwd ASE Fiber    | Bwd ASE Fiber            | Optical Power | ASE Power       | Package       | Fiber Type          | Fiber Sleeve  | Fiber Length | Connector Type          |
| 10~1nm             | R=High ER | B=Backward        | I=High    | Y=Same Fiber     | Y=Same Fiber             | 1= 1W         | 1= 1W           | M=Metal Box   | 2=PM980Fiber        | B= Bare fiber | 05=0.5m      | N=Without Connector     |
|                    | Blank for | T=Two-way         | Isolation | S=Corr. SM Fiber | S=Corr. SM Fiber         | 5= 5W         | 5= 5W           | H=H Box       | E=PM1060L Fiber     | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
|                    | Standard  | Blank for Forward | Blank for | N=None           | A=105/125um Fiber        | 10=10W        | 10=10W          | Blank for SST | Q=20/130 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 |               | R=25/250 PMDC Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |