# 1031nm High Power PM Bandpass Filter/Isolator Hybrid

# **FEATURES**

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth

# **APPLICATIONS**

- Optical Amplifying Systems
- Telecommunication Networks
- Laser Systems
- Research Labs

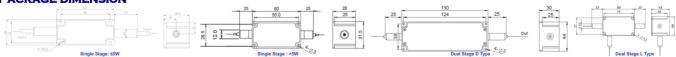
## **SPECIFICATIONS**

| Parameters              |                          | Unit | Single Stage   | Dual Stage      |  |  |  |
|-------------------------|--------------------------|------|--|-----------------|--|--|--|
| Center Wavelength       |                          | nm   | 1031   |                 |  |  |  |
| Min. Pass Band Width    | @ 0.5dB                  | nm   | 8.0  |                 |  |  |  |
| Stop Wavelength (ASE    | )                        | nm   | 960~1021&1041~1100                                     |                 |  |  |  |
| Insertion Loss@23°C     |                          | dB   | ≤1.5 (Typ. 0.8)  | ≤1.8 (Typ. 1.0) |  |  |  |
| Signal Isolation (23°C) |                          | dB   | ≥22  | ≥40             |  |  |  |
| Stop Wavelength         | Standard                 | dB   | ≥25  |                 |  |  |  |
| (ASE) 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   | ≥45  |                 |  |  |  |
| Extinction Ratio        |                          | dB   | ≥18  |                 |  |  |  |
| Work Mode               | S Type                   | -    | Can only work in slow axis                             |                 |  |  |  |
| Work Mode               | F Type                   |      | Can work both in slow axis and fast axis               |                 |  |  |  |
|                         |                          | -    | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L) |                 |  |  |  |
| Fibor Tyro              | Input&Output             |      | 10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W)       |                 |  |  |  |
| Fiber Type              |                          |      | 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                 |                 |  |  |  |
| Max. Signal Optical Pov | wer (CW)                 | W    | 0.5, 1, 2, 3, 5, 10, 15, 20, 25, 30, 40, 50, 60        |                 |  |  |  |
| Max. Backward Signal    | Optical Power (CW)       | W    | 0.3, 0.5, 1, 2, 3, 5, 10                               |                 |  |  |  |
| Max. ASE Optical Powe   | r (CW)                   | W    | 0.3 0.5, 1, 2, 3, 5, 10                                |                 |  |  |  |
| Operating Temperature   | e                        | °C   | 0~50   |                 |  |  |  |
| Storage Temperature     |                          | °C   | -20~75   |                 |  |  |  |

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

- 2. To add connectors, IL is 0.5dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
- 3. Suggest to use Y or X type if blocked optical power is >1W.
- 4. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
- 5. 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.
  - 6. Package size may be different for different fiber type, optical power and configurations.

### **PACKAGE DIMENSION**



#### **ORDERING INFORMATION (PN)**

| FHBI             | P-103     | 1-( <mark>C</mark> )NN(  | ( <mark>C</mark> )(C) | C         | - ( <mark>C</mark> )    | ( <b>C</b> )                 | ( <b>C</b> )-H      | IP <mark>NN</mark> -( | NN/NN)                  | -C                          | С             | NN -         | CC/CCC                  |
|------------------|-----------|--------------------------|-----------------------|-----------|-------------------------|------------------------------|---------------------|-----------------------|-------------------------|-----------------------------|---------------|--------------|-------------------------|
| Stage            | Bandwidth | ASE Type                 | ASE Iso               | Work Mode | Fwd ASE Fiber           | Bwd ASE /Signal Fiber        | Bwd Signal          | Signal Power          | ASE/Bwd Power           | Fiber Type                  | Fiber Sleeve  | Fiber Length | Connector Type          |
| D=D Type         | 80=8nm    | B=Backward               | I=High                | S= S Type | Y=Same Fiber            | Y=Same Fiber                 | Guide Out           | 05=500mW              | 1- 1W                   | 2=PM980Fiber                | B= Bare fiber | 05=0.5m      | N=Without Connector     |
| L=L Type         |           | T=Two-way                | Isolation             | F= F Type | A=105/125um Fiber       | <b>A=</b> 105/125um Fiber    | Y=Yes               | 1- 1W                 | 5= 5W                   | E=PM1060L Fiber             | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| <i>Blank</i> for |           | <i>Blank</i> for Forward | <i>Blank</i> for      |           | N=None                  | <b>5=</b> 50/125um Fiber     | <i>Blank</i> for No | 10- 10W               | 10-10W                  | <b>Q=</b> 20/130 PMDC Fiber | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
| Single           |           |                          | Standard              |           | <i>Blank</i> for D Type | <i>Blank</i> for None/D Type |                     | 20=20W                | <i>Blank</i> for 300 mW | R=25/250 PMDC Fiber         | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |

Compliant

