

## 1103nm BP/Partial Mirror Hybrid 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                         | 1103   |   |
| Min. Bandwidth@0.5dB            | nm                         | 10.0   |   |
| Excess Loss                     | dB                         | ≤1.3   |   |
| Stop Wavelength (ASE)           | nm                         | 1000~1093&1113~1150                                    |   |
| Stop Wavelength (ASE) Isolation | Standard                   | dB   | ≥25   |
|                                 | High Isolation             | dB   | ≥45   |
| Reflective Ratio                | %                          | 1±0.6, 2±0.8, 5±1, 10, 20, 30, 40, 50, 80, 90          |   |
| BP Position                     | Forward                    | -  | Bandpass is before the Mirror   |
|                                 | Backward                   | -  | Bandpass is after the Mirror  |
| Configuration                   | -                          | D: 2-port, Y: 3-port, (Forward/Backward ASE Guide Out) |   |
| Optical Return Loss             | dB                         | ≥45  |   |
| PDL                             | dB                         | ≤0.15  |   |
| Fiber Type                      | Input&Output               | -  | HI1060 Fiber or 10/125um SC Fiber (E)   |
|                                 |                            | -  | 10/125um DC Fiber (O), 15/130um DC Fiber (W)  |
|                                 | ASE Guide Out (Y Type)     | -  | 20/130um DC Fiber (Q) or 25/250um DC Fiber (R)  |
| Fiber Tensile Load              | N                          | 5  |   |
| Max. Average Optical Power      | 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                         | 0~50   |   |
| 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   | H: <sup>L</sup> 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); M: <sup>L</sup> 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 0.5dB higher, RL is 5dB lower.
  3. Suggest to use Y 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 optical power and configurations.

### ORDERING INFORMATION (PN)

| FHBR-NNNN-NN (C)  |           | - NN (C)  | (C)        | (C)         | -H NN P NN       | -(NN)         | -(C)       | (C)             | C                      | NN -CC/CCC        |               |                         |                         |
|-------------------|-----------|-----------|------------|-------------|------------------|---------------|------------|-----------------|------------------------|-------------------|---------------|-------------------------|-------------------------|
| Center Wavelength | Bandwidth | ASE Iso   | Ref. Ratio | BP Position | 3rd Port Fiber   | Average Power | Peak Power | ASE Power       | Package                | Fiber Type        | Fiber Sleeve  | Fiber Length            | Connector Type          |
| 1103~1103nm       | 100~10nm  | I=High    | O1=1%      | B=Backward  | Y=Same Fiber     | O3=300mW      | O1=100W    | I=1W            | M=Metal Box            | E=10/125 SC Fiber | B= Bare fiber | O5=0.5m                 | N=Without Connector     |
|                   |           | Isolation | O5=5%      | Blank for   | 5=50/125um Fiber | I=1W          | I=1kW      | 5=5W            | H=H Box                | Q=20/130 DC Fiber | L= Loose Tube | T0=1.0m                 | FC/APC=FC/APC Connector |
|                   |           | Blank for | 50=50%     | Forward     | Blank for D Type | 5=5W          | 5=5kW      | 10=10W          | Blank for SST          | R=25/250 DC Fiber | 2= 2mm Cable  | T5=1.5m                 | LC/PC=LC/PC Connector   |
|                   |           | Standard  | 90=90%     |             |                  | 10=10W        | 10=10kW    | Blank for 300mW | Blank for HI1060 Fiber | 3= 3mm Cable      | T0=2.0m       | SC/APC=SC/APC Connector |                         |

