# 1083nm PM BP/Partial Mirror Hybrid

### **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     |                            |      | 1083   |              |  |  |  |
| Min. Bandwidth@0.5dE  | 3                          | nm   | 8.0  |              |  |  |  |
| Excess Loss           |                            | dB   | ≤1.3   | ≤1.5         |  |  |  |
| Stop Wavelength (ASE  | )                          | nm   | 1000~1076&1090~1150                                    |              |  |  |  |
| Stop Wavelength       | Standard                   | dB   | ≥25  |              |  |  |  |
| (ASE) Isolation       | High Isolation             | dB   | ≥45  |              |  |  |  |
| Reflective Ratio      |                            | %    | 1±0.6, 2±0.8, 5±1, 10, 20, 30, 40, 50, 80, 90          |              |  |  |  |
| DD Decition           | Forward                    | -    | Bandpass is before the Mirror                          |              |  |  |  |
| BP Position           | Backward                   | -    | Bandpass is after the Mirror                           |              |  |  |  |
| Configuration         |                            | -    | D: 2-port, Y: 3-port, (Forward/Backward ASE Guide Out) |              |  |  |  |
| Optical Return Loss   |                            | dB   | ≥45  |              |  |  |  |
| Extinction Ratio      |                            | dB   | ≥18 ≥20  |              |  |  |  |
|                       |                            | -    | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L) |              |  |  |  |
| Fiber Type            | Input&Output               |      | 10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W)       |              |  |  |  |
|                       |                            |      | 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 (C | W)                         | mW   | 300  |              |  |  |  |
| Operating Temperature | e                          | °C   | 0~50   |              |  |  |  |
| Storage Temperature   |                            | °C   | -40~85   |              |  |  |  |
| Davis and Discount    | Stainless Steel Tube (SST) | mm   | <sup>∅</sup> 5.5x <sup>L</sup> 35                      |              |  |  |  |
| Package Dimension     | Metal Box                  | mm   | <sup>L</sup> 120x <sup>W</sup> 12x <sup>H</sup> 10     |              |  |  |  |

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. High ER type can only work in slow axis at pass port.
- 4. 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.
  - 5. Package size may be different for different optical power and configurations.

## **ORDERING INFORMATION (PN)**

| FPHR-NNNN -       | NN        | (C)              | NN                  | ( <b>C</b> )     | - (C)            | (C)                      | - ( <mark>C</mark> ) | C                   | C             | NN           | -CC/CCC                 |
|-------------------|-----------|------------------|---------------------|------------------|------------------|--------------------------|----------------------|---------------------|---------------|--------------|-------------------------|
| Center Wavelength | Bandwidth | ASE Iso          | Ref. Ratio          | BP Position      | Туре             | 3rd Port Fiber           | Package              | Fiber Type          | Fiber Sleeve  | Fiber Length | Connector Type          |
| 1083-1083nm       | 80=8nm    | I=High           | 01= 1%              | B=Backward       | R=High ER        | Y=Same Fiber             | M=Metal Box          | 2=PM980Fiber        | B= Bare fiber | 05=0.5m      | N=Without Connector     |
|                   |           | Isolation        | <mark>05=5</mark> % | <i>Blank</i> for | <i>Blank</i> for | S=Corr. SM Fiber         | <i>Blank</i> for SST | E=PM1060L Fiber     | L= Loose Tube | 10-1.0m      | FC/APC=FC/APC Connector |
|                   |           | <i>Blank</i> for | <del>50=</del> 50%  | Forward          | Standard         | <b>5=</b> 50/125um Fiber |                      | Q=20/130 PMDC Fiber | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
|                   |           | Standard         | 90=90%              |                  |                  | Blank for D Type         |                      | R=25/250 PMDC Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |



