# 975~1000nm PBC/PBS 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
- Research Labs
- Laser Systems



### **SPECIFICATIONS**

| Parameter  |                            |        | Unit | Value   |  |  |  |  |
|--|----------------------------|--------|------|---|--|--|--|--|
| Center Wavelength  |                            |        | nm   | 975, 980, 990, 1000   |  |  |  |  |
| Bandwidth  |                            |        | nm   | +/-15   |  |  |  |  |
| <u>.</u>   |                            | (Typ.) | dB   | 0.6   |  |  |  |  |
| Insertion Loss   |                            | (Max.) | dB   | 1.0   |  |  |  |  |
| Directivity  |                            |        | dB   | ≥50   |  |  |  |  |
| Optical Return Loss  |                            |        | dB   | ≥45   |  |  |  |  |
| Estimation Datie (for Ef   | DDC)                       | (Typ.) | dB   | 22  |  |  |  |  |
| Extinction Ratio (for FF   | BS)                        | (Min.) | dB   | 18  |  |  |  |  |
|  |                            |        |      | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L)  |  |  |  |  |
| Fiber Type of Port 1 & Port 2  |                            |        | -    | 10/125um PMDC Fiber (O) or 15/130um PMDC Fiber (W)  |  |  |  |  |
|  |                            |        |      | 20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R)  |  |  |  |  |
| Fiber Type of Port 3   |                            | S Type | -    | Corresponding SM Fiber  |  |  |  |  |
|  |                            | Р Туре | -    | Same Fiber to Port1&2, Slow axis align to Port 1  |  |  |  |  |
|  |                            | Q Type | -    | Same Fiber to Port1&2, Slow axis is 45° to Port 1   |  |  |  |  |
| Direction of Incident Polarization   |                            |        | -    | Slow Axis   |  |  |  |  |
| Fiber Tensile Load   |                            |        | N    | 5   |  |  |  |  |
| Max. Average Optical Power   |                            |        | W    | 0.3, 0.5, 1, 2, 3, 5 10, 15, 20, 25, 30, 40, 50, 60. 80, 100  |  |  |  |  |
| Max. Peak Power for Pulse  |                            |        | kW   | 0.1, 1, 2, 3, 5, 10, 15, 20   |  |  |  |  |
| Operating Temperature  |                            |        | °C   | 0~50  |  |  |  |  |
| Storage Temperature  |                            |        | °C   | -40~85  |  |  |  |  |
| Package Dimension  | Stainless Steel Tube (SST) |        | mm   | <sup>Ø</sup> 5.5x <sup>L</sup> 35 (≤5W); <sup>Ø</sup> 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: 1 Specifications are for device without connectors. Specifications may change without notice |                            |        |      |   |  |  |  |  |

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. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
- 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 fiber type.

## ORDERING INFORMATION (PN) FPBC=Polarization Beam Combiner; FPBS=Polarization Beam Splitter.

| FPBC - | NNN<br>Center Wavelength | - C<br>3rd Port Fiber | H NN F   | NN<br>Peak Power | - (C)<br>Package     | <b>C</b><br>Fiber Type      | <b>C</b><br>Fiber Sleeve | NN<br>Fiber Length | -CC/CCC Connector Type  |
|--------|--------------------------|-----------------------|----------|------------------|----------------------|-----------------------------|--------------------------|--------------------|-------------------------|
|        | 975=975nm                | S=S Type              | 03=300mW | 01-100W          | M=Metal Box          | 2=PM980Fiber                | B= Bare fiber            | 05=0.5m            | N=Without Connector     |
|        | 980-980nm                | P=P Type              | 1- 1W    | 1= 1kW           | <i>Blank</i> for SST | E=PM1060L Fiber             | L= Loose Tube            | 10=1.0m            | FC/APC=FC/APC Connector |
|        | 990=990nm                | Q=Q Type              | 5= 5W    | 5= 5kW           | or >10W              | <b>Q=</b> 20/130 PMDC Fiber | 2= 2mm Cable             | 15=1.5m            | LC/PC=LC/PC Connector   |
|        | 1000=1000nm              |                       | 10-10W   | 10-10kW          |                      | R=25/250 PMDC Fiber         | 3= 3mm Cable             | 20=2.0m            | SC/UPC=SC/UPC Connector |

