

## 1650nm High Power PBC(PBS)/Isolator Hybrid

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

### APPLICATIONS

- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- Transmitters and Fiber Lasers
- CATV Networks



### SPECIFICATIONS

| Parameter                                      | Unit                       | Single Stage   | Dual Stage  |
|--|----------------------------|--|---|
| Center Wavelength ( $\lambda_c$ )              | nm                         | 1650   |   |
| Isolation ( $\lambda_c \pm 5\text{nm}$ , 23°C) | dB                         | $\geq 20$  | $\geq 40$   |
| Insertion Loss ( $\lambda_c$ , 23°C)           | dB                         | $\leq 0.8$   | $\leq 1.1$  |
| Insertion Loss ( $\lambda_c$ , 0-50°C)         | dB                         | $\leq 1.3$   | $\leq 1.7$  |
| Optical Return Loss (Input/Output)             | dB                         | 50/50  | 50/50   |
| Extinction Ratio (for FHIS)                    | dB                         | $\geq 18$  |   |
| Fiber Type of Port 3                           | S Type                     | -  | Corresponding SM Fiber  |
|  | P Type                     | -  | 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                         |
| Fiber Type of Port 1 & Port 2                  | -                          | PM1550 Panda Fiber or PM1950 Fiber (V)<br>10/130um PMDC Fiber (O) or 25/250um PMDC Fiber (R) |   |
| Fiber Tensile Load                             | N                          | 5  |   |
| Max. Optical Power (CW)                        | W                          | 1, 2, 3, 5, 10   |   |
| Operating Temperature                          | °C                         | 0~50   |   |
| Storage Temperature                            | °C                         | -40~85   |   |
| Package  | Stainless Steel Tube (SST) | mm   | ( $\Phi$ )5.5x35 ( $\leq 5\text{W}$ ), ( $\Phi$ )6.0x48 ( $> 5\text{W}$ ) |
| Dimension                                      | Metal Box-M                | mm   | (L)120x(W)12x(H)10  |

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
  2. To add connectors, IL is 0.3dB 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.

### ORDERING INFORMATION (PN) FHIC=PBC/Isolator Hybrid; FHIS=PBS/Isolator Hybrid.

| FHIC<br>FHIS      | -NNNN           | -              | C             | C             | -HP NN              | -(C)          | C            | C                       | NN | -CC/CCC |
|-------------------|-----------------|----------------|---------------|---------------|---------------------|---------------|--------------|-------------------------|----|---------|
| Center Wavelength | Stage           | 3rd Port Fiber | Optical Power | Package       | Fiber Type          | Fiber Sleeve  | Fiber Length | Connector Type          |    |         |
| 1650-1650nm       | S= Single Stage | S=S Type       | 1=1W          | M= Metal Box  | 2=PM1550Fiber       | B= Bare Fiber | 05=0.5m      | N=Without Connector     |    |         |
|                   | D= Dual Stage   | P=P Type       | 2=2W          | Blank for SST | V=PM1950 Fiber      | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |    |         |
|                   |                 | Q=Q Type       | 5=5W          |               | O=10/130 PMDC Fiber | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |    |         |
|                   |                 |                | 10=10W        |               | R=25/250 PMDC Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |    |         |