

## 1545nm Bandpass Filter/Isolator Hybrid

### FEATURES

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

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks



### SPECIFICATIONS

| Parameters   | Unit                       | Single Stage  | Dual Stage                                   |
|--|----------------------------|---|--|
| Center Wavelength  | nm                         | 1545  |  |
| Min. Pass Band Width @ 0.5dB                                     | nm                         | 3.0, 4.0, 10.0, 12.0  |  |
| Stop Band @25dB  | 3nm Bandwidth              | 1510~1542 & 1548~1600   |  |
|  | 4nm Bandwidth              | 1510~1540 & 1550~1600   |  |
|  | 10nm Bandwidth             | 1510~1537 & 1553~1600   |  |
|  | 12nm Bandwidth             | 1510~1532 & 1558~1600   |  |
| Insertion Loss@23°C  | dB                         | ≤1.3  | ≤1.5   |
| Signal Isolation (23°C)  | dB                         | ≥28   | ≥40  |
| Configuration  | D Type                     | -   | 2-port                                       |
|  | Y Type                     | -   | 3-port, (Blocked Wavelength Guide Out)       |
|  | X Type                     | -   | 4-port, (Both Block Wavelength Guide Out)    |
| Fiber Type at 3 <sup>rd</sup> or 4 <sup>th</sup> Port (Y/X Type) | -                          | Same Fiber of other ports or 50/125um MM Fiber  |  |
| ASE Direction  | Forward Type               | -   | Bandpass Filter is before isolator           |
|  | Backward Type              | -   | Bandpass Filter is after isolator            |
|  | Twin Type                  | -   | Bandpass Filter is at both sides of isolator |
| Optical Return Loss  | dB                         | ≥45   |  |
| PDL  | dB                         | ≤0.2  |  |
| Fiber Type   | -                          | SMF-28 Fiber or 10/130um DC Fiber (O)<br>12/130um DC Fiber (T) or 20/130um DC Fiber (Q)<br>25/250um DC Fiber (R) or 25/300um DC Fiber (G) |  |
| Max. Optical Power (CW)  | mW                         | 300   |  |
| Operating Temperature  | °C                         | 0~50  |  |
| Storage Temperature  | °C                         | -40~85  |  |
| Package  | Stainless Steel Tube (SST) | mm  | (Ø)5.5x35                                    |
| Dimension  | Metal Box                  | 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.
  3. Suggest to use Y or X type if blocked optical power is >1W.
  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)

| FHBI-1545-C     | NN        | C          | -                | (C)                | (C)           | -                      | (C)           | (C)          | NN                      | -CC/CCC |
|-----------------|-----------|------------|------------------|--------------------|---------------|------------------------|---------------|--------------|-------------------------|---------|
| Stage           | Bandwidth | ASE Type   | 3rd Port Fiber   | 4th Port Fiber     | Package       | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |         |
| S= Single Stage | 30=3nm    | F= Forward | Y=Same Fiber     | Y=Same Fiber       | M=Metal Box   | O=10/130 DC Fiber      | B= Bare fiber | 05=0.5m      | N=Without Connector     |         |
| D= Dual Stage   | 40=4nm    | B=Backward | 5=50/125um Fiber | 5=50/125um Fiber   | Blank for SST | T=12/130 DC Fiber      | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |         |
|                 | 100=10nm  | T=Twin     | Blank for D Type | Blank for D&Y Type |               | G=25/300 DC Fiber      | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |         |
|                 | 120=12nm  |            |                  |                    |               | Blank for SMF-28 Fiber | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |         |

