GLOBAL ©+ PHOTONICS SOLUTIONS

## 1053nm High Power PM Bandpass Filter/Isolator Hybrid

## FeAtures

■ High Isolation

- Low Insertion Loss
- High Reliability and Stability

■ Various Bandwidth

## Applications

- Optical Amplifying Systems
- Telecommunication Networks
- Laser Systems
- Research Labs


## SPECIFICATIONS

| Parameters | Unit | Single Stage | Dual Stage |
| :---: | :---: | :---: | :---: |
| Center Wavelength | nm | 1053 |  |
| Min. Pass Band Width @ 0.5dB | nm | 1.0, 2.0, 4.0 |  |
| Stop wavelength 1nm Bandwidth | nm | 1000~1051\&1055~1100 |  |
| 2nm Bandwidth | nm | 1000~1049\&1057~1100 |  |
| (ASE) 4nm Bandwidth | nm | 1000~1047\&1059~1100 |  |
| Insertion Loss@ $23^{\circ} \mathrm{C}$ | dB | $\leq 1.5$ (Typ. 0.8) | $\leq 1.8$ (Typ. 1.0) |
| Signal Isolation ( $23^{\circ} \mathrm{C}$ ) | dB | $\geq 22$ | $\geq 40$ |
| Stop Wavelength Standard | dB | $\geq 25$ |  |
| (ASE) Isolation High Isolation | dB | $\geq 45$ |  |
| ASE Direction | - | F: Forward, B: Backward, T: Two-way |  |
| Configuration | - | D: 2-port, Y: 3-port, X: 4-port |  |
| Optical Return Loss | dB | $\geq 45$ |  |
| Extinction Ratio | dB | $\geq 18$ |  |
| Work Mode S Type | - | Can only work in slow axis |  |
| F Type |  | Can work both in slow axis and fast axis |  |
| Fiber Type | - | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L) 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 |  |
| Max. Signal Optical Power (CW) | W | $0.5,1,2,3,5,10,15,20,25,30,40,50,60$ |  |
| Max. Backward Signal Optical Power (CW) | W | $0.3,0.5,1,2,3,5,10$ |  |
| Max. ASE Optical Power (CW) | W | $0.30 .5,1,2,3,5,10$ |  |
| Operating Temperature | ${ }^{\circ} \mathrm{C}$ | 0~50 |  |
| Storage Temperature | ${ }^{\circ} \mathrm{C}$ | -20~75 |  |

Note: 1. Specifications are for device without connectors; Specifications may change without notice.
2. To add connectors, IL is 0.5 dB higher, RL is 5 dB lower, ER is 2 dB Lower, Connector key is aligned to slow axis.
3. Suggest to use $Y$ or $X$ type if blocked optical power is $>1 \mathrm{~W}$.
4. Only guarantee 1 W 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 fiber type, optical power and configurations.

## Package dimension



ORDERING INFORMATION (PN)
FHBP-1053-(C)NN(C)(C) C - (C)

| Stage | Bandwidth | ASE Type | ASE lso | Work Mode |
| :---: | :---: | :---: | :---: | :---: |
| D=D Type | $10=1 \mathrm{lnm}$ | B=Backward | I $=$ High | $S=S$ Type |
| L=L Type | $20=2 \mathrm{~nm}$ | $\mathrm{~T}=$ Two-way | Isolation | $\mathrm{F}=\mathrm{F}$ Type |
| Blankfor | $40=4 \mathrm{~nm}$ | Blankfor Forward | Blank for |  |
| Single |  |  | Standard |  |

(C)
(C)-HPNN -(NN/NN)


Bwd ASE/Signal Fiber Bwd Signal Fwd ASE Fiber $\gamma=$ Same Fiber $\quad Y=$ Same Fiber Guide Out
$A=105 / 125$ um Fiber
N=None
Slankfor D Type
Blank for None/D Type


2=PM980Fiber

$Q=20 / 130$ PMDC Fiber
R=25/250 PMDC Fiber

C NN - CC/CCC

## Fiber Sleeve Fiber Length Connector Type

$B=$ Bare fiber $\quad 05=0.5 \mathrm{~m} \quad N=$ Without Connector
$\mathrm{L}=$ Loose Tube $\quad 10=1.0 \mathrm{~m} \quad \mathrm{FC} / \mathrm{APC}=\mathrm{FC} / \mathrm{APC}$ Connector
$2=2 \mathrm{~mm}$ Cable
$15=1.5 \mathrm{~m}$
$L C / P C=L C / P C$ Connector
$20=2.0 \mathrm{~m} \quad \mathrm{SC} / \mathrm{UP}=\mathrm{SC} / \mathrm{UPC}$ Connector

