

## 1540nm Bandpass Filter/Isolator Hybrid for Pulse Power ( $\geq 7\text{nm BW}$ )

### FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks



### SPECIFICATIONS

Parameters	Unit	Single Stage	Dual Stage	H Stage
Center Wavelength	nm	1540		
Min. Pass Band Width @ 0.5dB	nm	7.0, 10.0, 15.0		
Stop Band @25dB	7nm Bandwidth	nm	1510~1533 & 1547~1600	
	10nm Bandwidth	nm	1510~1530 & 1550~1600	
	15nm Bandwidth	nm	1510~1527.5 & 1552.5~1600	
Insertion Loss@23°C	dB	$\leq 1.3$	$\leq 1.5$	$\leq 1.8$
Signal Isolation (23°C)	dB	$\geq 25$	$\geq 40$	$\geq 20$
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	$\geq 45$		
PDL	dB	$\leq 0.2$		
Fiber Type	-	SMF-28 Fiber or 10/130um DC Fiber (O) 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G)		
Max. Average Optical Power	W	0.3, 0.5, 1, 2, 3, 5, 10	15, 20	
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	Stainless Steel Tube (SST)	mm	$(\varnothing)5.5 \times 35$ ( $\leq 5\text{W}$ ); $(\varnothing)6.0 \times 48$ (5~10W)	
Dimension	Metal Box	mm	(L)120x(W)12x(H)10	

**Note:** 1. Specifications are for device without connectors; Specifications may change without notice.

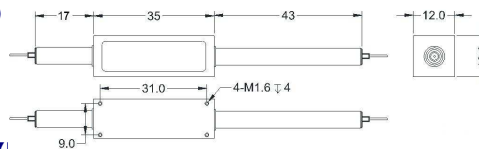
2. To add connectors, IL is 0.3dB higher, RL is 5dB lower.

3. Suggest to use Y or X type if blocked optical power is  $> 1\text{W}$ .

4. Only guarantee 1W 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.

### PACKAGE DIMENSION (H STAGE)



### ORDERING INFORMATION (PIN)

FHBI-1540-C NN C - (C) (C) -H NN P NN -(C) (C) C NN -CC/CCC

Stage	Bandwidth	ASE Type	3rd Port Fiber	4th Port Fiber	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
S= Single Stage	70=7nm	F= Forward	Y=Same Fiber	Y=Same Fiber	03=300mW	01=100W	M=Metal Box	O=10/130 DC Fiber	B= Bare fiber	05=0.5m	N=Without Connector
D= Dual Stage	100=10nm	B=Backward	5=50/125um Fiber	5=50/125um Fiber	1= 1W	1= 1kW	Blank for SST	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
H= H Stage	150=15nm	T=Twin	Blank for D Type	Blank for D&Y Type	5= 5W	5= 5kW	or >10W	G=25/300 DC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
					10=10W	10=10kW		Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector

