

## 1550nm PM Bandpass Filter for Pulse Power ( $\leq 7\text{nm BW}$ )

### FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth
- High Optical Power

### APPLICATIONS

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



### SPECIFICATIONS

Parameters		Unit	Standard	High ER Type
Center Wavelength		nm	1550	
Min. Pass Band Width @ 0.5dB		nm	0.12, 0.3, 0.7, 1.0, 2.0, 3.0, 5.0, 7.0	
Insertion Loss over Pass Band Wavelength		dB	$\leq 1.0$	$\leq 1.2$
Stop Wavelength (ASE)	0.12nm Bandwidth	nm	1500~1549.4 & 1550.6~1610	
	0.3nm Bandwidth	nm	1500~1549 & 1551~1610	
	0.7nm Bandwidth	nm	1500~1548.5 & 1551.5~1610	
	1nm Bandwidth	nm	1500~1548 & 1552~1610	
	2nm Bandwidth	nm	1500~1547 & 1553~1610	
	3nm Bandwidth	nm	1500~1546 & 1554~1610	
	5nm Bandwidth	nm	1500~1545 & 1555~1610	
Stop Wavelength (ASE) Isolation	Standard	dB	$\geq 25$	
	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	$\geq 50$	
Extinction Ratio		dB	$\geq 18$	$\geq 20$
Fiber Type	Input&Output	-	PM1550 Panda Fiber or 10/125um PMDC Fiber NA=0.08 (O) 10/130um PMDC Fiber NA=0.15 (O2) or 12/130um PMDC Fiber (T) 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)	
	ASE Guide Out (Y/X Type)	-	Same Fiber, Corr. SM Fiber or MM Fiber	
Fiber Tensile Load		N	5	
Max. Average Optical Power (ASE+Signal)		W	0.3, 0.5, 1, 2, 3, 5, 10, 15, 20,30, 50, 60, 80, 100	
Max. Peak Power for pulse		kW	0.1, 1, 2, 3, 5, 10, 15, 20	
Max. ASE Average Power		W	0.3, 0.5, 1, 2, 3, 4, 5, 10	
Operating Temperature		$^{\circ}\text{C}$	0~70	
Storage Temperature		$^{\circ}\text{C}$	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	$\phi 5.5 \times L35$ ( $\leq 5\text{W}$ ); $\phi 6.0 \times L50$ (5~10W)	
	Metal Box	mm	H: $L90 \times W12 \times H10$ ( $> 10\text{W}$ ); M: $L120 \times W12 \times H10$ ( $\leq 10\text{W}$ )	

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  - High ER type can only work in slow axis; Suggest to use Y/X type or H Box if blocked optical power is  $\geq 1\text{W}$ .
  - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  - 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 size may be different for different optical power and configurations.

### ORDERING INFORMATION (PN)

FPBP-1550-NN(C)(C)(C) - (C) (C) - HNN PNN -(NN) -(C) C C NN -CC/CCC

Bandwidth	Type	ASE Type	ASE Iso	Fwd ASE Fiber	Bwd ASE Fiber	Average Power	Peak Power	ASE Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
03=0.3nm	R=High ER	B=Backward	I=High	Y=Same Fiber	Y=Same Fiber	03=300mW	01=100W	1= 1W	M=Metal Box	2=PM1550Fiber	B= Bare fiber	05=0.5m	N=Without Connector
07=0.7nm	Blank for	T=Two-way	Isolation	S=Corr. SM Fiber	S=Corr. SM Fiber	1= 1W	1= 1kW	5= 5W	H=H Box	0=10/125 PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
20=2nm	Standard	Blank for Forward	Blank for	N=None	A=105/125um Fiber	5= 5W	10= 10kW	10=10W	Blank for SST	T=12/130 PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
50=5nm		Standard	Blank for D Type	Blank for D Type	Blank for None or D Type	20=20W	20=20kW	Blank for 300mW		G=25/300 PMDC Fiber	3= 3mm Cable	20=2.0m	SC/UFC=SC/UFC Connector