

## 1550nm PM Bandpass Filter for Pulse Power ( $\geq 8\text{nm BW}$ )

### 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	8.0, 11, 13, 16, 22, 27, 50, 75, 100	
Insertion Loss over Pass Band Wavelength	dB	$\leq 1.0$	$\leq 1.2$
Stop Wavelength (ASE)	8nm Bandwidth	nm	1520~1542 & 1558~1610
	11nm Bandwidth	nm	1520~1541 & 1559~1610
	13nm Bandwidth	nm	1520~1540 & 1560~1610
	16nm Bandwidth	nm	1500~1537 & 1563~1610
	22nm Bandwidth	nm	1500~1533 & 1567~1610
	27nm Bandwidth	nm	1500~1528 & 1572~1610
	50nm Bandwidth	nm	1500~1520 & 1580~1610
	75nm Bandwidth	nm	1450~1500 & 1600~1650
100nm Bandwidth	nm	1440~1490 & 1610~1660	
Stop Wavelength (ASE) Isolation	Standard	dB	$\geq 25$
	High Isolation	dB	$\geq 45$
ASE Direction Configuration	-	F: Forward, B: Backward, T: Two-way	
	-	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	$\phi 5.5 \times L 35 (\leq 5\text{W}); \phi 6.0 \times L 50 (5 \sim 10\text{W})$
	Metal Box	mm	H: $L 90 \times W 12 \times H 10 (> 10\text{W}); M: L 120 \times W 12 \times H 10 (\leq 10\text{W})$

- 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) - H NN 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
80-8nm	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
110-11nm	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
220-22nm	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
1000-100nm		Standard	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/UPC=SC/UPC Connector

