

1542nm High Power Bandpass Filter

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	Value	
Center Wavelength	nm	1542	
Min. Pass Band Width @ 0.5dB	nm	0.12, 0.3, 0.7, 5.0, 12, 17	
Insertion Loss over Pass Band Wavelength	dB	≤1.2	
Stop Wavelength (ASE)	0.12nm Bandwidth	nm	1500~1541.4 & 1542.6-1600
	0.3nm Bandwidth	nm	1500~1541 & 1543-1600
	0.7nm Bandwidth	nm	1500~1540.5 & 1543.5-1600
	5nm Bandwidth	nm	1500~1537 & 1547-1600
	12nm Bandwidth	nm	1500~1529 & 1555-1600
Stop Wavelength (ASE)	17nm Bandwidth	nm	1500~1527 & 1557-1600
	Standard	dB	≥25
Isolation	High Isolation	dB	≥45
ASE Direction	-	F: Forward, B: Backward, T: Two-way	
Configuration	-	D: 2-port, Y: 3-port, X: 4-port	
Optical Return Loss	dB	≥50	
Polarization Dependent Loss	dB	≤0.15	
Fiber Type	Input&Output	-	SMF-28 Fiber or 10/130um DC Fiber NA=0.08 (O) 10/130um DC Fiber NA=0.15 (O2) or 12/130um DC Fiber (T) 25/250um DC Fiber (R) or 25/300um DC Fiber (G)
	ASE Guide Out (Y/X Type)	-	Same Fiber or MM Fiber
Fiber Tensile Load	N	5	
Max. Optical Power (CW, ASE+Signal)	W	1, 2, 3, 5, 10, 15, 20, 30, 50, 60, 80, 100	
Max. ASE Optical Power (CW)	W	0.3, 0.5, 1, 2, 3, 4, 5, 10	
Operating Temperature	°C	0~70	
Storage Temperature	°C	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	∅5.5x ^L 35 (≤5W); ∅6.0x ^L 50 (5~10W)
	Metal Box	mm	H: ^L 90x ^W 12x ^H 10 (>10W); M: ^L 120x ^W 12x ^H 10 (≤10W)

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
 - To add connectors, IL is 0.3dB higher, RL is 5dB lower.
 - Suggest to use Y/X type or H Box if blocked optical power is ≥1W.
 - 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)

FFBP-1542-NN(C) (C) - (C) (C) -HP NN -(NN) -(C) (C) C NN -CC/CCC											
Bandwidth	ASE Type	ASE Iso	Fwd ASE Fiber	Bwd ASE Fiber	Optical Power	ASE Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
03=0.3nm	B=Backward	I=High	Y=Same Fiber	Y=Same Fiber	1=1W	1=1W	M=Metal Box	O=10/130 DC Fiber	B= Bare fiber	05=0.5m	N=Without Connector
07=0.7nm	T=Two-way	Isolation	A=105/125um Fiber	A=105/125um Fiber	5=5W	5=5W	H=H Box	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
50=5nm	Blank for Forward	Blank for	N=None	5=50/125um Fiber	10=10W	10=10W	Blank for SST	G=25/300 DC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
170=17nm		Standard	Blank for D Type	Blank for None or D Type	20=20W	Blank for 300mW		Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector