

## 1540nm High Power Multimode 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	1540	
Min. Pass Band Width @ 0.5dB	nm	0.12, 0.3, 0.7, 2.5, 5.0, 7.0, 10.0, 15.0	
Insertion Loss over Pass Band Wavelength	dB	≤1.2	
Stop Wavelength (ASE)	0.12nm Bandwidth	nm	1510~1539.4 & 1540.6~1600
	0.3nm Bandwidth	nm	1510~1539 & 1541~1600
	0.7nm Bandwidth	nm	1510~1538.5 & 1541.5~1600
	2.5nm Bandwidth	nm	1510~1537 & 1543~1600
	5nm Bandwidth	nm	1510~1535 & 1545~1600
	7nm Bandwidth	nm	1510~1533 & 1547~1600
	10nm Bandwidth	nm	1510~1530 & 1550~1600
15nm Bandwidth	nm	1510~1527 & 1553~1600	
Stop Wavelength (ASE)	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	≥30	
Fiber Type	Input&Output	-	50/125um (OM2) or 62.5/125um (OM1) MM Fiber 50/125um OM3 MM Fiber (3) or OM4 MM Fiber(4) 105/125um MM Fiber, NA=0.12(D), 0.15(B), 0.22(A)
	ASE Guide Out (Y/X Type)	-	Same 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 <sup>L</sup> 35 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)
	Metal Box	mm	H: <sup>L</sup> 90x <sup>W</sup> 12x <sup>H</sup> 10 (>10W); M: <sup>L</sup> 120x <sup>W</sup> 12x <sup>H</sup> 10 (≤10W)

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.3dB higher, RL is 10dB lower.
  - Specifications are tested at low order modes.
  - 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.
  - Package size may be different for different optical power and configurations.

### ORDERING INFORMATION (PN)

**FMBP-1540-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	5- 50/125um MM Fiber	B= Bare fiber	05=0.5m	N=Without Connector
50=5nm	T=Two-way	Isolation	N=None	Blank for None or D Type	5- 5W	5- 5W	H=H Box	6- 62.5/125um MM Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
100=10nm	Blank for Forward	Blank for	Blank for D Type		10=10W	10=10W	Blank for SST	3- OM3 MM Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
150=15nm		Standard			20=20W	Blank for 300mW		A- 105/125um, NA=0.22	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector