

# 1626nm PM Bandpass Filter/Isolator Hybrid

#### **FEATURES**

- High Isolation
- Low Insertion Loss
- Various Bandwidth
- High Reliability and Stability
- Compact Package

### **APPLICATIONS**

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



## **SPECIFICATIONS**

Center Wavelength         nm         1626           Min. Pass Band Width @ 0.5dB         nm         16.0           Stop Band @ 25dB         nm         1500~1612 & 1640~1650           Insertion Loss@23°C         dB         ≤1.4         ≤1.6           Signal Isolation (23°C)         dB         ≥22         ≥40           Configuration         Y Type         -         2-port           Configuration         Y Type         -         3-port, (Blocked Wavelength Guide Out)           X Type         -         4-port, (Both Block Wavelength Guide Out)           X Type at 3 <sup>rd</sup> or 4 <sup>th</sup> Port (Y/X Type)         -         Same Fiber, Corr. SM Fiber or 50/125um MM Fiber           Porward Type         -         Bandpass Filter is before isolator           ASE Direction         Backward Type         -         Bandpass Filter is after isolator           Optical Return Loss         dB         ≥45           Extinction Ratio         dB         ≥18           Work Mode         S Type         -         Can only work in slow axis           PM1550 Panda Fiber or 10/125um PMDC Fiber (0)         12/130um PMDC Fiber (T), 20/130um PMDC Fiber (C)           Fiber Type         -         12/130um PMDC Fiber (R) or 25/300um PMDC Fiber (G)           Max. Optical Power (CW)	Parameters		Unit	Single Stage	Dual Stage		
Stop Band @ 25dB	Center Wavelength	l	nm	1626			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Min. Pass Band Wid	dth @ 0.5dB	nm	16.0			
Signal Isolation (23°C)       dB       ≥22       ≥40         Configuration       D Type       -       2-port         Configuration       Y Type       -       3-port, (Blocked Wavelength Guide Out)         X Type       -       4-port, (Both Block Wavelength Guide Out)         X Type at 3 <sup>rd</sup> or 4 <sup>th</sup> Port (Y/X Type)       -       Same Fiber, Corr. SM Fiber or 50/125um MM Fiber         ASE Direction       Backward Type       -       Bandpass Filter is before isolator         Bandpass Filter is after isolator       Bandpass Filter is at both sides of isolator         Optical Return Loss       dB       ≥45         Extinction Ratio       dB       ≥18         Work Mode       S Type       -       Can only work in slow axis         F Type       Can work both in slow axis and fast axis       PM1550 Panda Fiber or 10/125um PMDC Fiber (O)         Fiber Type       -       12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)         25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)         Max. Optical Power (CW)       mW       300	Stop Band @ 25dB		nm	1500~1612 & 1640~1650			
D Type       2-port         Configuration       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, Corr. SM Fiber or 50/125um MM Fiber         Forward Type       -       Bandpass Filter is before isolator         Bandpass Filter is after isolator         Twin Type       -       Bandpass Filter is at both sides of isolator         Optical Return Loss       dB       ≥45         Extinction Ratio       dB       ≥18         Work Mode       S Type       -       Can only work in slow axis         F Type       Can work both in slow axis and fast axis         PM1550 Panda Fiber or 10/125um PMDC Fiber (0)         Fiber Type       -       12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)         Fiber Type       -       12/130um PMDC Fiber (R) or 25/300um PMDC Fiber (G)         Max. Optical Power (CW)       mW       300	Insertion Loss@23	°C	dB	≤1.4 ≤1.6			
Configuration  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, Corr. SM Fiber or 50/125um MM Fiber  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  ≥45  Extinction Ratio  Mork Mode  S Type  - Can only work in slow axis  F Type  Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300	Signal Isolation (23	3°C)	dB	≥22 ≥40			
Type at 3 <sup>rd</sup> or 4 <sup>th</sup> Port (Y/X Type) - Same Fiber, Corr. SM Fiber or 50/125um MM Fiber  Forward Type - Bandpass Filter is before isolator  Backward Type - Bandpass Filter is after isolator  Twin Type - Bandpass Filter is after isolator  Optical Return Loss dB ≥45  Extinction Ratio dB ≥18  S Type - Can only work in slow axis  F Type Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW) mW 300		D Type	-	2-port			
Fiber Type at 3 <sup>rd</sup> or 4 <sup>th</sup> Port (Y/X Type) - Same Fiber, Corr. SM Fiber or 50/125um MM Fiber  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 ≥45  Extinction Ratio dB ≥18  Work Mode S Type - Can only work in slow axis  F Type Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW) mW 300	Configuration	Y Type	-	3-port, (Blocked Wavelength Guide Out)			
ASE Direction  Backward 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  Extinction Ratio  Work Mode  S Type - Can only work in slow axis  F Type - Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mw  300		X Type	-	4-port, (Both Block Wavelength Guide Out)			
ASE Direction  Backward Type  Twin Type  Bandpass Filter is after isolator  Optical Return Loss  Extinction Ratio  Bandpass Filter is at both sides of isolator  Optical Return Loss  Extinction Ratio  Bandpass Filter is after isolator  AB  245  Extinction Ratio  S Type  Can only work in slow axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300	Fiber Type at 3 <sup>rd</sup> or	· 4 <sup>th</sup> Port (Y/X Type)	-	Same Fiber, Corr. SM Fiber or 50/125um MM Fiber			
Twin Type       -       Bandpass Filter is at both sides of isolator         Optical Return Loss       dB       ≥45         Extinction Ratio       dB       ≥18         Work Mode       S Type       -       Can only work in slow axis         F Type       Can work both in slow axis and fast axis         PM1550 Panda Fiber or 10/125um PMDC Fiber (O)         Fiber Type       -       12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)         25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)         Max. Optical Power (CW)       mW       300	ASE Direction	Forward Type	-	Bandpass Filter is before isolator			
Optical Return Loss       dB       ≥45         Extinction Ratio       dB       ≥18         Work Mode       S Type       -       Can only work in slow axis         F Type       Can work both in slow axis and fast axis         PM1550 Panda Fiber or 10/125um PMDC Fiber (O)         Fiber Type       -       12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)         25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)         Max. Optical Power (CW)       mW       300		Backward Type	-	Bandpass Filter is after isolator			
Extinction Ratio       dB       ≥18         Work Mode       S Type       -       Can only work in slow axis         F Type       Can work both in slow axis and fast axis         PM1550 Panda Fiber or 10/125um PMDC Fiber (O)         Fiber Type       -       12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)         25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)         Max. Optical Power (CW)       mW       300		Twin Type	-	Bandpass Filter is at both sides of isolator			
Work Mode  S Type  F Type  Can only work in slow axis  Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type  - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300	Optical Return Loss	5	dB	≥45			
Work Mode  F Type  Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type  - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300	Extinction Ratio		dB	≥18			
F Type  Can work both in slow axis and fast axis  PM1550 Panda Fiber or 10/125um PMDC Fiber (O)  Fiber Type  - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)  25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300	Work Modo	S Type	-	Can only work in slow axis			
Fiber Type  - 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q) 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW)  mW  300		F Type		Can work both in slow axis and fast axis			
25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)  Max. Optical Power (CW) mW 300				PM1550 Panda Fiber or 10/125um PMDC Fiber (O)			
Max. Optical Power (CW) mW 300	Fiber Type		-	12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)			
				25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)			
	Max. Optical Power	(CW)	mW	300			
Operating Temperature °C 0~70	Operating Tempera	ature	°C	0~70			
Storage Temperature °C -40~85	Storage Temperatu	ıre	°C	-40~85			
Package Stainless Steel Tube (SST) mm (Ø)5.5x35	Package	Stainless Steel Tube (SST)	mm	(Ø)5.	5x35		
Dimension Metal Box mm (L)120x(W)12x(H)10	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, ER is 2dB Lower, Connector key is aligned to slow axis.
- 3. Suggest to use Y or X type if blocked optical power is >1W.
- 4. 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.

## **ORDERING INFORMATION (PN)**

FHBP-1626-C NNN C		C	C - (C)		(C) - (C)	С	C NN - CC/CCC			
Stage	Bandwidth	ASE Type	Work Mode	3rd Port Fiber	4th Port Fiber	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
S= Single Stage	160=16nm	F= Forward	S= S Type	Y=Same Fiber	Y=Same Fiber	M=Metal Box	2=PM1550Fiber	B= Bare fiber	<mark>05=</mark> 0.5m	N=Without Connector
D= Dual Stage		B=Backward	F= F Type	S=Corr. SM Fiber	S=Corr. SM Fiber	<i>Blank</i> for SST	<b>0=</b> 10/125 PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
		T=Twin		<b>5=</b> 50/125um Fiber	5=50/125um Fiber		T=12/130 PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
				<i>Blank</i> for D Type	<i>Blank</i> for D&Y Type		G=25/300 PMDC Fiber	3= 3mm Cable	<b>20=</b> 2.0m	SC/UPC=SC/UPC Connector



