

1540nm High Power Bandpass Filter/Isolator Hybrid (≥7nm BW)

FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability

APPLICATIONS

- **Broadband Systems**
- **Optical Amplifying Systems**
- Telecommunication Networks



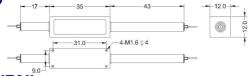
SPECIFICATIONS

Center Wavelength nm 1540 Min. Pass Band Width @ 0.5dB nm 7.0, 10.0, 15.0 Stop Band @25dB 7nm Bandwidth nm 1510~1533 & 1547~1600 Insertion Loss@23°C dB 1510~1527.5 & 1552.5~1600 Insertion Loss@23°C dB ≤1.3 ≤1.5 ≤1.8 Signal Isolation (23°C) dB ≥25 ≥40 ≥20 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 - 4-port, (Both Block Wavelength Guide Out) Fiber Type at 3 rd or 4 th Port (Y/X Type) - Same Fiber of other ports or 50/125um MM Fiber Bandpass Filter is after isolator Bandpass Filter is after isolator ASE Direction Backward Type - Bandpass Filter is at both sides of isolator Optical Return Loss dB ≤45 Secolator PDL dB ≤0.2 Secolator Fiber Type <th>Parameters</th> <th>Unit</th> <th>Single Stage</th> <th>Dual Stage</th> <th>H Stage</th>	Parameters	Unit	Single Stage	Dual Stage	H Stage			
Stop Band @25dB 7nm Bandwidth 10nm 1510~1533 & 1547~1600 Insertion Loss@23°C dB ≤1.3 ≤1.5 ≤1.8 Signal Isolation (23°C) dB ≥25 ≥40 ≥20 Configuration Y Type - 3-port, (Blocked Wavelength Guide Out) X Type - 4-port, (Both Block Wavelength Guide Out) Fiber Type at 3 rd or 4 th Port (Y/X Type) - Same Fiber of other ports or 50/125um MM Fiber Forward Type - Bandpass Filter is before isolator ASE Direction Backward Type - Bandpass Filter is after isolator Optical Return Loss dB ≥45 PDL dB ≤0.2 SMF-28 Fiber or 10/130um DC Fiber (O) Fiber Type - 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) Fiber Type - 12/130um DC Fiber (R) or 25/300um DC Fiber (G) Max. Optical Power (CW) W 1, 2, 3, 5, 10 15, 20 Operating Temperature °C 0~50 Storage Temperature °C -40~85 Package Stainless Steel Tube (SST) mm	Center Wavelength	nm	1540					
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15nm Bandwidth		7nm Bandwidth	nm	1510~1533 & 1547~1600				
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Signal Isolation (23	dB	≥25	≥20				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		D Type	-	2-port				
Fiber Type at 3 rd or 4 th Port (Y/X Type) Forward Type ASE Direction Backward Type Twin Type - Bandpass Filter is before isolator Bandpass Filter is after isolator Bandpass Filter is after isolator Bandpass Filter is at both sides of isolator Deficial Return Loss Deficial Return Loss Bandpass Filter is at both sides of isolator Deficial Return Loss Bandpass Filter is after isolator Bandpass Filter isolator Bandpass Filter isolator Bandpass Filter isolator Bandpass Filter isolator B	Configuration	Y Type	-	3-port, (Blocked Wavelength Guide Out)				
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ASE Direction Backward Type - Bandpass Filter is after isolator Twin Type - Bandpass Filter is at both sides of isolator Optical Return Loss dB ≥45 PDL dB ≤0.2 SMF-28 Fiber or 10/130um DC Fiber ($^{\circ}$) Fiber Type - 12/130um DC Fiber ($^{\circ}$) or 20/130um DC Fiber ($^{\circ}$) Max. Optical Power (CW) W 1, 2, 3, 5, 10 15, 20 Operating Temperature $^{\circ}$ C $^{\circ}$ C $^{\circ}$ C $^{\circ}$ Storage Temperature $^{\circ}$ C $^{\circ}$ C $^{\circ}$ C $^{\circ}$ C $^{\circ}$ Storage Temperature $^{\circ}$ C $^{\circ}$ C $^{\circ}$ C $^{\circ}$ Storage Stainless Steel Tube (SST) mm ($^{\circ}$ 0)5.5x35 (≤5W); ($^{\circ}$ 0)6.0x48 (5~10W) See Drawing	Fiber Type at 3 rd or	-	Same Fiber of other ports or 50/125um MM Fiber					
Twin Type - Bandpass Filter is at both sides of isolator Optical Return Loss dB ≥45 PDL dB ≤0.2 SMF-28 Fiber or 10/130um DC Fiber (O) Fiber Type - 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G) 25/250um DC Fiber (R) or 25/300um DC Fiber (G) Max. Optical Power (CW) W 1, 2, 3, 5, 10 15, 20 Operating Temperature °C 0~50 Storage Temperature °C -40~85 Package Stainless Steel Tube (SST) mm (Ø)5.5x35 (≤5W); (Ø)6.0x48 (5~10W) See Drawing		Forward Type	-	Bandpass Filter is before isolator				
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PDL dB ≤0.2 SMF-28 Fiber or 10/130um DC Fiber (O) Fiber Type - 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G) W 1, 2, 3, 5, 10 15, 20 Operating Temperature °C 0~50 Storage Temperature °C -40~85 Package Stainless Steel Tube (SST) mm (Ø)5.5x35 (≤5W); (Ø)6.0x48 (5~10W) See Drawing		Twin Type	-	Bandpass Filter is at both sides of isolator				
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See Drawing	Storage Temperature		°C	-40~85				
Dimension Metal Box mm (L)120x(W)12x(H)10	Package	Stainless Steel Tube (SST)	mm	(Ø)5.5x35 (≤5W); (Ø)6.0x48 (5~10W)	See Drawing		
	Dimension	Metal Box	mm	(L)120x(W)12x(H)10	Jee Drawing		

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.
- 3. Suggest to use Y or X type if blocked optical power is >1W.
- 4. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
- 5. 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 DIMENSION (H STAGE)



ORDERING INFORMATION (PN)

FHBI-1540-C	NN	С	- (C)	(C) -	HP NN	- (<mark>C</mark>)	(C)	C	NN	-CC/CCC
Stage	Bandwidth	ASE Type	3rd Port Fiber	4th Port Fiber	Optical Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
S= Single Stage	<mark>70=</mark> 7nm	F= Forward	Y=Same Fiber	Y=Same Fiber	1- 1W	M=Metal Box	0= 10/130 DC Fiber	B= Bare fiber	<mark>05=</mark> 0.5m	N=Without Connector
D= Dual Stage	100=10nm	B=Backward	5= 50/125um Fiber	5=50/125um Fiber	5= 5W	<i>Blank</i> for SST	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
H= H Stage	150=15nm	T=Twin	<i>Blank</i> for D Type	<i>Blank</i> for D&Y Type	10-10W	or >10W	G=25/300 DC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
					<mark>20</mark> =20W		<i>Blank</i> for SMF-28 Fiber	3= 3mm Cable	20- 2.0m	SC/UPC=SC/UPC Connector

