

## 1500~1600/1900~1970nm WDM/Isolator Hybrid Filter for Pulse

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks

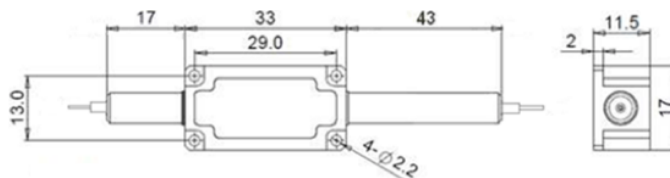


### SPECIFICATIONS

Parameters	Unit	Single Stage	Dual Stage	H Stage
Signal Wavelength Range $\lambda_1$	nm	1900 $\pm$ 10, 1930 $\pm$ 20, 1950 $\pm$ 20, 1970 $\pm$ 20		
Pump Wavelength Range $\lambda_2$	nm	1530 $\pm$ 20, 1550 $\pm$ 20, 1570 $\pm$ 20, 1590 $\pm$ 20		
Insertion Loss	Signal Channel@ $\lambda_1$	dB	$\leq$ 1.6	$\leq$ 2.0
	Pump Channel@ $\lambda_2$	dB	$\leq$ 1.0	
Signal Isolation (Signal Channel@ $\lambda_1$ )	dB	$\geq$ 10	$\geq$ 25	$\geq$ 25
Signal/Pump Wavelength Isolation	dB	$\geq$ 25/12		
Optical Return Loss	dB	$\geq$ 45		
PDL	dB	$\leq$ 0.2		
Fiber Type			SMF-28 Fiber or SM1950 Fiber (V)	
			10/130um DC Fiber (O) or 25/250um DC Fiber (R)	
Fiber Tensile Load	N	5		
Max. Average Optical Power	W	0.3, 0.5, 1, 2		3, 5, 10
Max. Peak Power for pulse	kW	0.1, 1, 2, 5, 10, 15, 20		
Operating Temperature	$^{\circ}$ C	0~50		
Storage Temperature	$^{\circ}$ C	-40~85		
Package Dimension	Stainless Steel Tube (SST)	mm	$(\varnothing)$ 5.5x35	
	Metal Box	mm	(L)120x(W)12x(H)10	
			See 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. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  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.

### DIMENSION DRAWING (H STAGE)



### ORDERING INFORMATION (PN)

FHWM-NN	NN	-	C	C	-H NN	P NN	-(C)	(C)	C	NN	-CC/CCC
Pump WL	Signal WL	Stage	Pump Type	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type	
53=1530nm	90=1900nm	S=Single Stage	F=Forward	03=300mW	01=100W	M=Metal Box	V=SM1950 Fiber	B=Bare fiber	05=0.5m	N=Without Connector	
15=1550nm	93=1930nm	D=Dual Stage	B=Backward	1=1W	1=1kW	Blank for SST	O=10/130 DC Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector	
57=1570nm	19=1950nm	H=H Stage		5=5W	10=10kW	or >2W	R=25/250 DC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector	
59=1590nm	97=1970nm			10=10W	20=20kW		Blank for SMF-28 Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector	