

# 1480/1550~1590nm WDM/Partial Mirror Hybrid for Pulse Power

## FEATURES

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

## APPLICATIONS

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



## SPECIFICATIONS

Parameters	Unit	Value	
Signal Wavelength Range $\lambda_1$	nm	1530~1580, 1570~1610	
Pump Wavelength Range $\lambda_2$	nm	1460~1490	
Excess Loss	Signal Channel@ $\lambda_1$	dB	$\leq 1.1$
Insertion Loss	Pump Channel@ $\lambda_2$	dB	$\leq 0.8$
Signal Reflective Ratio (Common $\leftrightarrow$ Pass)	%	$1\pm 0.6, 2\pm 0.8, 5\pm 1, 10, 20, 30, 40, 50, 60, 70, 80, 90$	
Wavelength	Signal Channel@ $\lambda_2$	dB	$\geq 25$
Isolation	Pump Channel@ $\lambda_1$	dB	$\geq 12$
Optical Return Loss		dB	$\geq 45$
PDL		dB	$\leq 0.2$
Pump Type	Forward	-	Pump&Signal at same direction
	Backward	-	Pump&Signal at reverse direction
Fiber Type	Common & Signal Port	-	SMF-28 Fiber or 10/130um DC Fiber (O)
		-	12/130um DC Fiber (T), 20/130um DC Fiber (Q)
	Pump Port	-	25/250um DC Fiber (R) or 25/300um DC Fiber (G)
		-	Same Fiber or SMF-28 Fiber
Fiber Tensile Load	N		5
Maximum Average Optical Power	W		0.3, 0.5, 1, 2, 3, 5, 10, 15, 20
Max. Peak Power for Pulse	kW		0.1, 1, 2, 3, 5, 10, 15, 20
Operating Temperature	$^{\circ}\text{C}$		0~50
Storage Temperature	$^{\circ}\text{C}$		-40~85
Package Dimension	Stainless Steel Tube (SST)	mm	( $\varnothing$ )5.5x40 ( $\leq 5\text{W}$ ); ( $\varnothing$ )6.0x48 (5~10W)
	Metal Box	mm	(L)90x(W)18x(H)10 (>10W); (L)120x(W)12x(H)10 ( $\leq 10\text{W}$ )

- 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.

## ORDERING INFORMATION (PN)

FFHP-14NN	- (C)	NN	(C)	-H NN	P NN	-(C)	(C)	C	NN	-CC/CCC
Pass Wavelength	Pump Type	Refl. Ratio	Pump Fiber	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
15-1550nm	F=Forward	01=1%	S=SMF-28 Fiber	03=300mW	01=100W	M=Metal Box	O=10/130 DC Fiber	B= Bare fiber	05=0.5m	N=Without Connector
59=1590nm	Blank for Backward	05=5%	Blank for Same Fiber	1=1W	1=1kW	Blank for SST	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
		10=10%		5=5W	5=5kW	or >10W	R=25/250 DC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
		50=50%		20=20W	20=20kW		Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector