

# 1480/1550~1590nm High Power WDM/Partial Mirror PM Hybrid

## 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	Standard Type	High ER Type
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	$\leq 1.1$	$\leq 1.3$
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	$\geq 45$	
Extinction Ratio		dB	$\geq 18$	$\geq 20$
Pump Type	Forward	-	Pump&Signal at same direction	
	Backward	-	Pump&Signal at reverse direction	
Fiber Type	Common&Signal Port	-	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)			
	Pump Port	-	Same Fiber, Corr. SM Fiber or PM1310 Fiber	
Fiber Tensile Load		N	5	
Maximum Optical Power (CW)		W	1, 2, 3, 5, 10, 15, 20	
Operating Temperature		°C	0~50	
Storage Temperature		°C	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	$(\varnothing)5.5 \times 40$ ( $\leq 5W$ ); $(\varnothing)6.0 \times 48$ (5~10W)	
	Metal Box	mm	(L)90x(W)18x(H)10 (>10W); (L)120x(W)12x(H)10 ( $\leq 10W$ )	

- 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. 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.
  5. High ER type can only work in slow axis at pass port.

## ORDERING INFORMATION (PN)

FPHP-14NN	-(C)	NN	(C)	(C)	-HP NN	-(C)	C	C	NN	-CC/CCC
Pass Wavelength	Pump Type	Refl. Ratio	Pump Fiber	Type	Optical Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
15=1550nm	F=Forward	01=1%	S=Corr. SM Fiber	H=High ER	1=1W	M=Metal Box	2=PM1550 Fiber	B= Bare fiber	05=0.5m	N=Without Connector
59=1590nm	Blank for Backward	05=5%	P=PM1310 Fiber	Blank for Standard	5=5W	Blank for SST	0=10/125 PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
		10=10%	Blank for Same Fiber		10=10W	or >10W	T=12/130 PMDC Fiber	2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
		50=50%			20=20W		R=25/250 PMDC Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector