

## 780~850/2000nm WDM/Partial Mirror PM 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	Standard Type	High ER Type
Signal Wavelength Range $\lambda_1$	nm	1900±10, 1930±20, 1950±20, 1970±20, 2000±30, 2030±20, 2050±10, 2070±10	
Pump Wavelength Range $\lambda_2$	nm	780+/-10, 793+/-10, 808+/-10, 830+/-10, 850+/-10	
Excess Loss	Signal Channel@ $\lambda_1$	dB	≤1.5
Insertion Loss	Pump Channel@ $\lambda_2$	dB	≤1.3
Signal Reflective Ratio (Common<->Pass)		%	1±0.6, 2±0.8, 5±1, 10, 20, 30, 40, 50, 60, 70, 80, 90
Wavelength	Signal Channel@ $\lambda_2$	dB	≥25
Isolation	Pump Channel@ $\lambda_1$	dB	≥12
Optical Return Loss		dB	≥45
Extinction Ratio		dB	≥18
Pump Type	Forward	-	Pump&Signal at same direction
	Backward	-	Pump&Signal at reverse direction
Fiber Type	Common&Signal Port	-	PM1550 Panda Fiber or PM1950 Fiber (V) 10/130um PMDC Fiber (O) or 25/250um PMDC Fiber (R)
	Pump Port	-	Same Fiber or Corr. SM Fiber, PM850 Fiber, PM780HP Fiber (7) or HI780 Fiber
Fiber Tensile Load		N	5
Maximum Average Optical Power		W	0.3, 0.5, 1, 2, 3, 5, 10
Max. Peak Power for Pulse		kW	0.1, 1, 2, 3, 5, 10, 15, 20
Operating Temperature		°C	0~50
Storage Temperature		°C	-40~85
Package Dimension	Stainless Steel Tube (SST)	mm	(Ø)5.5x40 (≤5W); (Ø)6.0x48 (5~8W)
	Metal Box	mm	(L)90x(W)18x(H)10 (>8W); (L)120x(W)12x(H)10 (≤8W)

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
  2. To add connectors, IL is 0.7dB 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-NNNN - (C)	NN (C)	(C) -H	NN	P NN	-(C)	C	C	NN	-CC/CCC			
Ref. WL	Pass WL	Pump Type	Ref. Ratio	Pump Fiber	Type	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
78-780nm	19-1950nm	F=Forward	01=1%	Y=Same Fiber	H=High ER	03=300mW	01=100W	M=Metal Box	2=PM1550 Fiber	B=Bare fiber	05=0.5m	N=Without Connector
79-793nm	90=1900nm	Blank for Backward	05=5%	P=PM850 Fiber	Blank for Standard	1=1W	1=1kW	Blank for SST	V=PM1950 Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector
81-808nm	20=2000nm		10=10%	H=HI780 Fiber		5=5W	5=5kW	or>8W	0=10/130 PMDC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
85-850nm	25=2050nm		50=50%	S=Corr. SM Fiber		10=10W	20=20kW		R=25/250 PMDC Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector