

## C/L Band Split PM WDM Filter

## FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging
- Broadband SystemsOptical Amplifying Systems

**APPLICATIONS** 

- Telecommunication Networks
- Metro Networks
- CATV Networks



## SPECIFICATIONS

ParametersUnitStandardHigh ER TypePass Channel Wavelength Range $\lambda 1$ nm1500-1563 or 1570-1610Reflective Channel Wavelength Range $\lambda 2$ nm1570-1610 or 1500-1563Insertion Loss over $\lambda 1$ @ Pass ChanneldB $\leq 1.0$ $\leq 1.2$ Insertion Loss over $\lambda 2$ @ Reflective ChanneldB $\leq 0.8$ ConfigurationY Type- $3$ -portConfiguration over $\lambda 1$ @ Reflective ChanneldB $\geq 12$ Isolation over $\lambda 1$ @ Reflective ChanneldB $\geq 25$ Optical Return LossdB $\geq 20$ $\geq 22$ Extinction RatiodB $\geq 20$ $\geq 22$ Fiber Type-12/130um PMDC Fiber (I), 20/130um PMDC Fiber (Q), 25/250um PMDC Fiber (Q), 25/250um PMDC Fiber (Q), 25/250um PMDC Fiber (G)Polarization Alignment-Slow Axis										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Parameters			Standard	High ER Type					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Pass Channel Wavelength Range $\lambda 1$		nm	1500-1563 or 1570-1610						
$\begin{tabular}{ c c c c c c c } \hline Insertion Loss over $\lambda$2 @ Reflective Channel & dB & $\leq 0.8$ \\ \hline Configuration & $Y$ Type & - & $3$-port \\ \hline $X$ Type & - & $4$-port (2x2 WDM) \\ \hline Isolation over $\lambda$1 @ Reflective Channel & dB & $\geq 12$ \\ \hline Isolation over $\lambda$2 @ Pass Channel & dB & $\geq 25$ \\ \hline $Optical Return Loss & $dB$ & $\geq 50$ \\ \hline Extinction Ratio & $dB$ & $\geq 20$ & $\geq 22$ \\ \hline $Fiber Type$ & $-$ & $12/130um PMDC Fiber, 10/125um PMDC Fiber (0), $12/130um PMDC Fiber (0), $25/250um PMDC Fiber (R), $25/300um PMDC Fiber (G) \\ \hline $Event{tabular}$	Reflective Channel Wa	avelength Range $\lambda 2$	nm	1570-1610 or 1500-1563						
$\frac{Y \text{ Type}}{X \text{ Type}} = \frac{-3 \text{ -port}}{4 \text{ -port} (2 \times 2 \text{ WDM})}$ Isolation over $\lambda 1 @ \text{Reflective Channel}$ dB $\geq 12$ Isolation over $\lambda 2 @ \text{Pass Channel}$ dB $\geq 25$ Optical Return Loss dB $\geq 50$ Extinction Ratio dB $\geq 20$ $\geq 22$ Fiber Type $-12/130 \text{ m PMDC Fiber (0)}, 12/130 \text{ m PMDC Fiber (0)}, 25/250 \text{ m PMDC Fiber (C)}$	Insertion Loss over $\lambda 1$ @ Pass Channel			≤1.0 ≤1.2						
ConfigurationX Type-4-port (2x2 WDM)Isolation over $\lambda 1$ @ Reflective ChanneldB $\geq 12$ Isolation over $\lambda 2$ @ Pass ChanneldB $\geq 25$ Optical Return LossdB $\geq 50$ Extinction RatiodB $\geq 20$ Fiber Type-12/130um PMDC Fiber (1), 20/130um PMDC Fiber (0), 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Insertion Loss overλ2	dB	≤0.8							
X Type-4-port (2x2 WDM)Isolation over $\lambda 1$ @ Reflective ChanneldB $\geq 12$ Isolation over $\lambda 2$ @ Pass ChanneldB $\geq 25$ Optical Return LossdB $\geq 50$ Extinction RatiodB $\geq 20$ Fiber Type-12/130um PMDC Fiber, 10/125um PMDC Fiber (Q), 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Configuration	Ү Туре	-	3-port						
$ \begin{array}{ c c c c c } \hline Isolation \ over \ \lambda 2 \ @ \ Pass \ Channel & dB & \geq 25 \\ \hline Optical \ Return \ Loss & dB & \geq 50 \\ \hline Extinction \ Ratio & dB & \geq 20 & \geq 22 \\ \hline Fiber \ Type & - & PM1550 \ Panda \ Fiber, \ 10/125 \ un \ PMDC \ Fiber \ (O), \\ 12/130 \ un \ PMDC \ Fiber \ (T), \ 20/130 \ un \ PMDC \ Fiber \ (Q) \\ 25/250 \ un \ PMDC \ Fiber \ (R), \ 25/300 \ un \ PMDC \ Fiber \ (G) \\ \hline \end{array} $		Х Туре	-	4-port (2x2 WDM)						
Optical Return Loss     dB     ≥50       Extinction Ratio     dB     ≥20     ≥22       Fiber Type     -     12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q), 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Isolation over $\lambda 1 @ R$	dB	≥12							
Extinction RatiodB≥20≥22Fiber Type-PM1550 Panda Fiber, 10/125um PMDC Fiber (O), 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q) 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Isolation over $\lambda 2 @ P$	dB	≥25							
Fiber Type         -         PM1550 Panda Fiber, 10/125um PMDC Fiber (O),           Fiber Type         -         12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)           25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Optical Return Loss		dB	≥50						
Fiber Type         -         12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)           25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)	Extinction Ratio		dB	≥20	≥22					
25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)				PM1550 Panda Fiber, 10/125um PMDC Fiber (O),						
	Fiber Type		-	12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)						
Polarization Alignment - Slow Axis				25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)						
	Polarization Alignment		-	Slow Axis						
Fiber Tensile Load N 5	Fiber Tensile Load		N	5						
Max. Optical Power (CW) mW 300	Max. Optical Power (CW)		mW	300						
Operating Temperature °C 0~70	Operating Temperature		°C	0~70						
Storage Temperature °C -40~85	Storage Temperature		°C	-40~85						
Stainless Steel Tube (SST) mm (Ø)5.5x35	Package Dimension	Stainless Steel Tube (SST)	mm	(Ø)5.5x35						
Metal Box mm (L)120x(W)12x(H)10		Metal Box	mm	(L)120x(W)12x(H)10						

**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.

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.

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

## **ORDERING INFORMATION (PN)**

FPWM-NN	NN	- ( <mark>C</mark> )	( <mark>C</mark> )	- ( <mark>C</mark> )	С	С	NN	-CC/CCC
Ref Wavelength	Pass Wavelength	Configuration	Туре	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
<mark>15=</mark> 1550nm	<mark>59</mark> =1590nm	<mark>X</mark> = X Type	H= High ER	M=Metal Box	2=PM1550 Fiber	B= Bare Fiber	<mark>05=</mark> 0.5m	N=Without Connector
<mark>59=</mark> 1590nm	<mark>15</mark> =1550nm	<i>Blank</i> for Y Type	<i>Blank</i> for	<i>Blank</i> for SST	<mark>0=</mark> 10/125 PMDC Fiber	L= Loose Tube	<mark>10=</mark> 1.0m	FC/APC=FC/APC Connector
			Standard		T=12/130 PMDC Fiber	<mark>2</mark> =2mm Cable	<mark>15</mark> =1.5m	LC/PC =LC/PC Connector
					R=25/250 PMDC Fiber	<mark>3</mark> =3mm Cable	<mark>20</mark> =2.0m	SC/UPC=SC/UPC Connector

