

# C and C/L Band WDM Filters

Fiberdyne Labs C and C/L Band Filters are Wavelength Division Multiplexer (WDM) devices that utilize stable Thin Film Filters and advanced packaging technology. Our devices achieve excellent performance and operating stability over temperature. The devices combine or separate light at different wavelengths, over a wide bandpass. They are typically used to combine or separate Red Band wavelengths and Blue Band wavelengths within C Band, or C and L Bands in DWDM systems. Our filters provide low insertion loss, high channel isolation, and low PDL over a broad temperature range.

## Features:

- High Isolation
- Low Insertion Loss
- RoHS Compliant
- Telcordia GR-1209 and GR-1221 Compliant

## Applications:

- Local Area Networks
- FTTH Networks



## Specifications:

Parameters	C /L Band	C Band Red/Blue	C Band Supervisory
Operating Wavelength $\lambda_1/\lambda_2$ (nm)	1525~1562/1570~1615	1520~1543/1547~1570	1500~1520/1528~1570
Pass Port Max Insertion Loss (Typical)	$\leq 1.0\text{dB}$ (0.6)	$\leq 1.0\text{dB}$ (0.6)	$\leq 1.0\text{dB}$ (0.6)
Pass Port Ripple	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
Pass Port Isolation	$\geq 25\text{dB}$	$\geq 20\text{dB}$	$\geq 25\text{dB}$
Reflect Port Max Insertion Loss (Typical)	$\leq 0.6\text{dB}$ (0.4)	$\leq 0.6\text{dB}$ (0.4)	$\leq 0.6\text{dB}$ (0.4)
Reflect Port Isolation	$\geq 12\text{dB}$	$\geq 12\text{dB}$	$\geq 12\text{dB}$
Directivity	$\geq 50\text{dB}$	$\geq 50\text{dB}$	$\geq 50\text{dB}$
Return Loss	$\geq 45\text{dB}$	$\geq 45\text{dB}$	$\geq 45\text{dB}$
Polarization Dependent Loss	$\leq 0.1\text{dB}$	$\leq 0.1\text{dB}$	$\leq 0.1\text{dB}$
IL Temp. Sensitivity (dB/°C)	$\leq 0.005\text{dB}$	$\leq 0.005\text{dB}$	$\leq 0.005\text{dB}$
Max Input Power Rating	300 mW		
Operating Temperature (°C)	-5 ~ 65 °C		

1. Max insertion loss without connectors
2. Standard MOQ 10 Pieces

Ordering Information:

FWDM	-	XX	X	X	X	X	XX	X
		Type	Configuration	Filter Dimension (mm)	Fiber Type	Fiber Length	Package	Connector Type
Fiberdyne WDM		CL= C/L Band	1= $\lambda$ 1 Pass, $\lambda$ 2 Reflect	1=5.5*35	1=SMF28e	1=1m	25=Filter Device 250um	0=None
		CS= C Band Supervisory	2= $\lambda$ 2 Pass, $\lambda$ 1 Reflect			Y=Custom	90=Filter Device 900um	1=ST/UPC
		RB= C Band Red/Blue					C2= Filter Case 2.0mm	6=SC/UPC
							C3= Filter Case 3.0mm	7=FC/UPC
							C9= Filter Case 900um	A=FC/APC
							LM=LGX Module	B=SC/APC
							RM=1U Rackmount	L=LC/UPC
							WM= Wall mount Module	N=LC/APC
							YY= Custom Package	Y=Custom