

Ultra-Narrow, Ultra-Sharp Tunable Filter

CVF-300CL / BVF-300CL

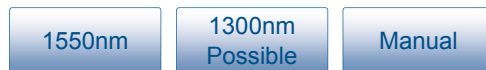
- Unprecedented sharpness: 1500dB/nm roll-off
- Unprecedented narrow-ness: min. bandwidth 30pm (3.7GHz)
- Flexible: both bandwidth- and wavelength-tunable



CVF-300CL (Programmable)

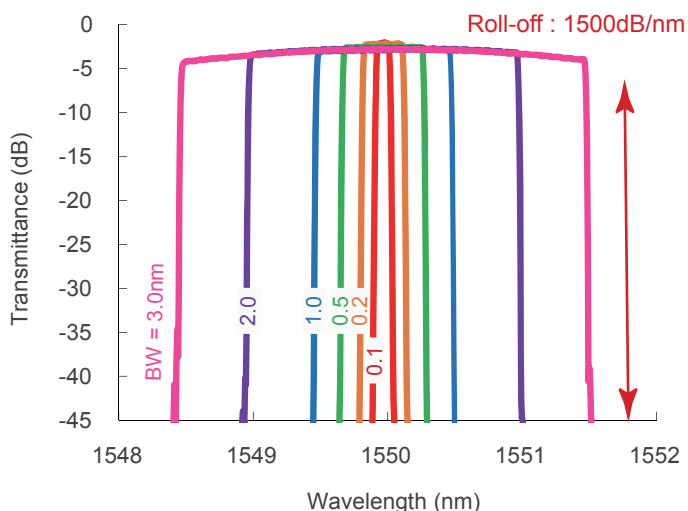


BVF-300CL (Manual)



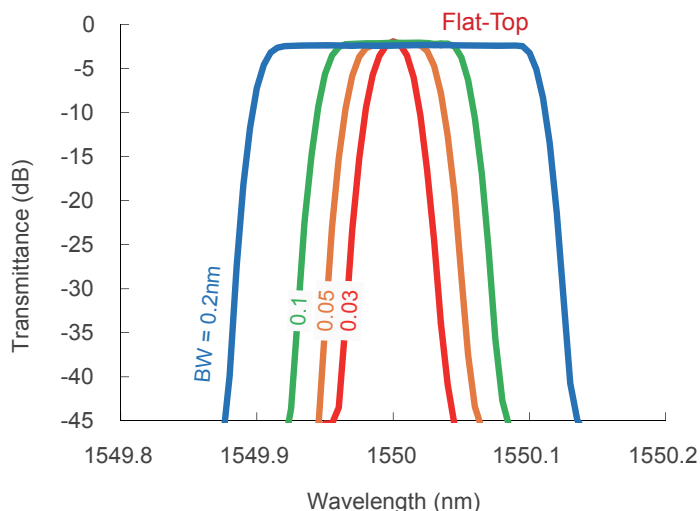
Ultra-Sharp Edge Roll-Off

The filter exhibits an ultra-sharp roll-off of **1500dB/nm** (**12dB/GHz**), without compromising the flexibility of bandwidth- and wavelength-tuning. Ideal for DWDM channel selection and removing ASE noise.



Continuously-Tunable BW: 0.03 to 3nm

The 3dB bandwidth is **30pm (3.7GHz)** at its narrowest, and is also continuously tunable to 3nm (370GHz). Filtering of <1GHz optical frequency comb lines is also possible by combining with etalons.





Specifications



Parameter	CVF-300CL			BVF-300CL			Unit
	Min.	Typ.	Max.	Min.	Typ.	Max.	
3dB Bandwidth Tunability	0.03		3	0.03		3	nm
	3.7		370	3.7		370	GHz
Filter-Edge Roll-Off ¹	1000	1500		1000	1500		dB/nm
Center Wavelength Tunability	(Standard)		1525			1610	nm
	(Option) ²		1515			1630	nm
Wavelength Accuracy	<±0.05			—			nm
Wavelength Repeatability	<±0.01			—			nm
Insertion Loss ³ (3dB Bandwidth > 0.1nm)			4.5			4.5	dB
	(3dB Bandwidth = 0.03nm)		5.5			5.5	dB
Return Loss	40	45		40	45		dB
Out-of-Band Suppression	40	50		40	50		dB
Polarization Dependent Loss (SMF-type only)	0.2			0.2			dB
Maximum Input Power ⁴	500			500			mW
Optical Fiber	SMF or PMF			SMF or PMF			
Optical Connector	FC or SC, SPC or APC			FC or SC, SPC or APC			
Advanced Features	Peak Search, Built-in Power Meter			—			
PC Interface	Front panel (Local), USB and GPIB (Remote)			—			
Electrical Power	100-240V (50/60Hz) Vac, AC adaptor included			—			
Dimensions (W x H x D) ⁵	236 x 88 x 405			236 x 88 x 380			mm
Weight	9			7			kg



1. Calculated between -3dB and -40dB points. 2. Within the wavelength range of 1515-1525nm and 1610-1630nm, specifications such as max. insertion loss, min. 3dB bandwidth, roll-off etc may vary from the values specified above. 3. May increase by <0.5dB due to connector losses. 4. Max. 300mW in the case of PMF (ensure linear polarization aligned to slow axis, in order to avoid damage). 5. Not including protruding parts. Note: The above specifications are guaranteed at ambient temperature of 25 ± 1 °C. In the case of CVF-300CL, allow sufficient warm-up time for stable operation. The above specifications may change without prior notice.

Customization

- Manual filters in 1000nm and 1300nm wavelength ranges.
- Dual-channel filter (Filter out 2 wavelengths from the spectrum. Manual version.).
- Please inquire for other customizations.

Ordering Information

BVF-300CL -  - 
 Fiber Type Connector Type

CVF-300CL -  - 
 Fiber Type Connector Type

Fiber Type Code		Connector Type Code	
SM:	Standard Single Mode	FS:	FC/SPC
		SS:	SC/SPC
PM:	Polarization Maintaining	FA:	FC/APC
		SA:	SC/APC

Our Guarantee

We understand that insertion loss and other parameters are important for our customers. Be assured that within the wavelength range of 1525-1610nm, all of the above specifications are guaranteed. For example, even at the

minimum BW of 30pm, the insertion loss is typically 5.5dB, and guaranteed to be less than 7dB and 8dB, for BVF-300CL and CVF-300CL, respectively.