

Ultra-Narrow Bandwidth-Variable Tunable Filter

CVF-300CL / BVF-300CL

Unprecedented sharpness: 1500dB/nm roll-off

Unprecedented narrowness: min. bandwidth 30pm (3.7GHz)

Flexible: both bandwidth- and wavelength-tunable



CVF-300CL (Programmable)



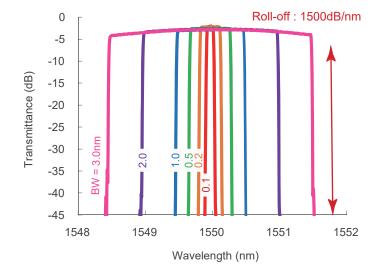


BVF-300CL (Manual)



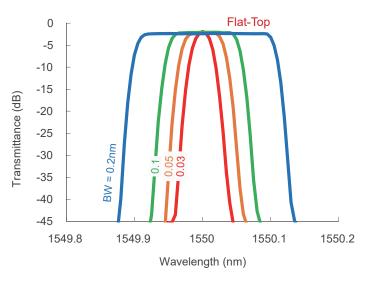
Ultra-Sharp Edge Roll-Off

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

		CVF-300CL			BVF-300CL			
		min.	typ.	max.	min.	typ.	max.	unit
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	1525		1610	nm
	(Optional) ²	1515		1630	1515		1630	nm
Wavelength accuracy			< +/-0.05			_		nm
Wavelength repeatability			< +/-0.01			_		nm
Insertion loss ³ (3 dB Bandwidth > 0.1 nm)			4.5	6.5		4.5	5.5	dB
(3 dB Bandwidth = 0.03 nm)			5.5	8		5.5	7	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		USB, GPIB			_			
Power supply		AC 100-240 (50 / 60 Hz), AC adapter			_			V
Dimension (W x H x D) ⁵		236 x 88 x 405			236 x 88 x 380 ⁶			mm
Weight		9		7			kg	

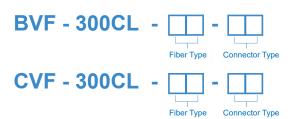
^{1.} Calculated between -3 dB and -40 dB points.

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.

Options

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

Ordering Information





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

^{2.} Within the wavelength range of 1515-1525 nm and 1610-1630 nm, specifications such as max. insertion loss, min. 3 dB bandwidth, roll-off etc may vary from the values specified above.

^{3.} May increase by < 0.5 dB due to connector losses.

^{4.} Max. 300 mW in the case of PMF (ensure linear polarizaton aligned to slow axis, in order to avoid damage).

^{5.} Not including protruding parts.

^{6.} For CE version, the casing dimension is 236 x 88 x 405 mm.