

# Ultra-Narrow Bandwidth-Variable Tunable Filter

## POF-80-CL



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

POF-80-CL

1550nm

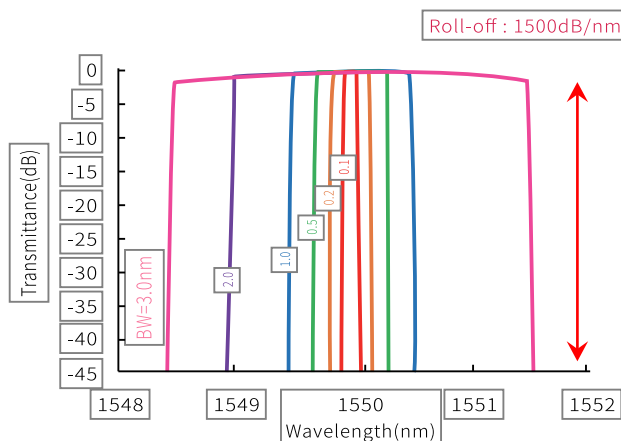
Power  
Monitor

Peak  
Search

Remote

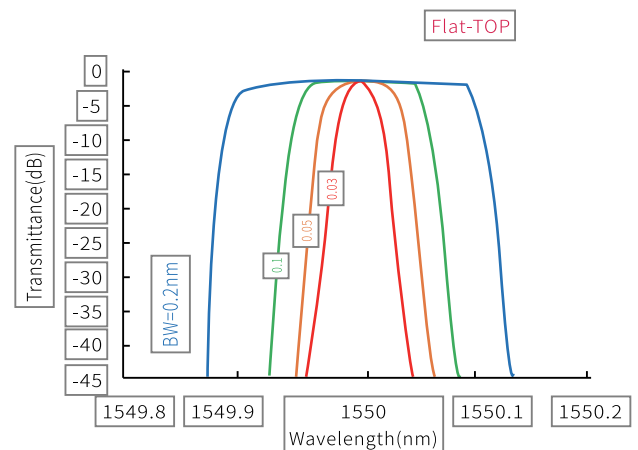
### ◀ Ultra-Sharp Edge Roll-Off

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.



## Technical Specifications

		POF-80-CL		
		min.	typ.	max.
3dB bandwidth tunability		0.03 nm		3 nm
		3.7 GHz		370 GHz
Filter-edge roll-off <sup>1</sup>		1000 dB/nm	1500 dB/nm	
Center wavelength tunability	(Standard)	1525 nm		1610 nm
	(Optional) <sup>2</sup>	1515 nm		1630 nm
Wavelength accuracy			< +/-0.05 nm	
Wavelength repeatability			< +/-0.01 nm	
Insertion loss <sup>3</sup>	(3 dB Bandwidth > 0.1 nm)		4.5 dB	6.5dB
	(3 dB Bandwidth = 0.03 nm)		5.5 dB	8 dB
Return loss		40dB	45dB	
Out-of -band suppression		40dB	50 dB	
Polarization dependent loss (SMF-type only )			0.2dB	
Maximum input power <sup>4</sup>				500 mW
Optical fiber		SMF or PMF		
Optical connector		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		
Dimension (W x H x D) <sup>5</sup>		236mm x 88mm x 405mm		
Weight		9 kg		

1. Calculated between -3 dB and -40 dB points.

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 polarization aligned to slow axis, in order to avoid damage).

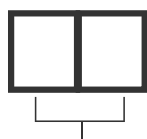
5. Not including protruding parts.

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

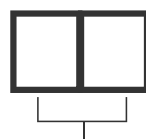
The above specifications are guaranteed at ambient temperature of 25 +/- 1 °C. In the case of POF-80-CL, allow sufficient warm-up time for stable operation. The above specifications may change without prior notice.

## Ordering Information

**POF-80-CL**



Fiber Type



Connector Type

Fiber Type

SM: Standard Single Mode

PM: Polarization Maintaining

Connector Type

FS: FC/SPC SS: SC/SPC

FA: FC/APC SA: SC/APC