

Adjustable Bandwidth Tunable Filter

OTF-350

The OTF-350 is a versatile manually optical tunable filter that allows simultaneous and independent tuning of center wavelength and bandwidth over C & L bands. Its unique precision free-space optics and accurate tuning mechanism bring forth excellent optical control and a flat top passband shape of filtered signal.

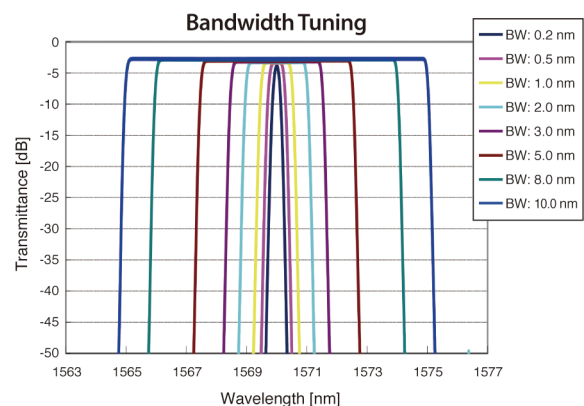
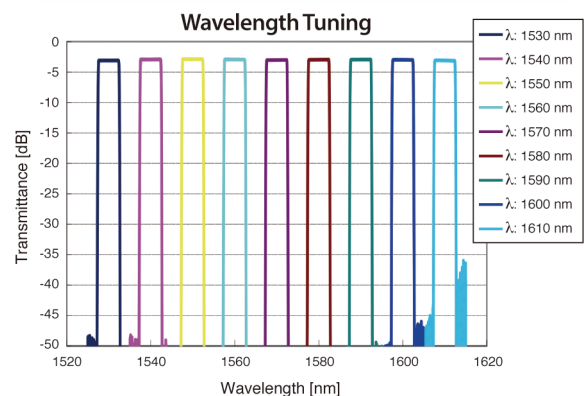
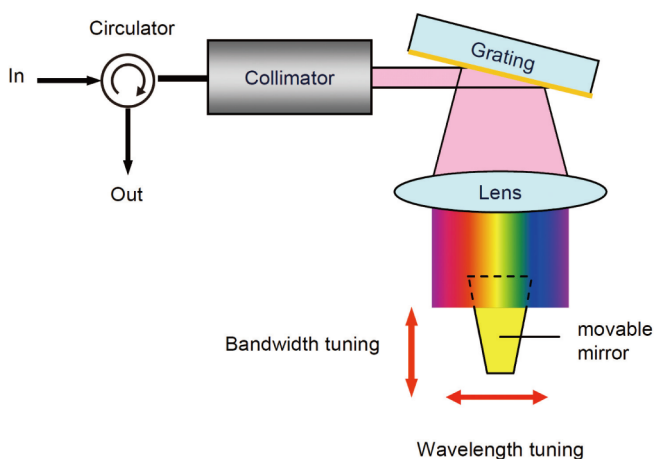
Features

- ▶ Wavelength tuning range: 80 nm
- ▶ Wavelength range: 1530-1610 nm (C&L Band)
O-band is available.
- ▶ Bandwidth: 0.2-10.0 nm (Normal type)
0.1-15.0 nm (Wide type)
- ▶ Center wavelength and transmission bandwidth can be independently and continuously changed
- ▶ Flat-top filter shape

Applications

- ▶ 40 Gb/s, 100 Gb/s transmission test
- ▶ WDM wavelength tuning
- ▶ ASE noise filtering
- ▶ Pulse shaping
- ▶ Next generation bundle wavelength OXC

Tuning Mechanism



Specifications

Normal type: BW 0.2 - 10 nm

Category	Parameter	Unit	Specification	Notes
Wavelength Characteristics	Wavelength Range	nm	1530 - 1610	
	Tuning Range	nm	80	
Filter Characteristics	Bandwidth @-3 dB	nm	0.2 - 10.0	
	Bandwidth @-20 dB	nm	≤ 0.6	Bandwidth@-3 dB = 0.2 nm
			≤ 11	Bandwidth@-3 dB = 10.0 nm
Power Characteristics	Group Velocity Dispersion	ps/nm	≤ ±1 (typ. ≤ ±0.2)	
	Maximum Input Power	dBm	+25	
	Insertion Loss	dB	≤ 5 (typ. ≤ 3.5)	Bandwidth@-3 dB ≥ 0.5 nm
			≤ 7	Bandwidth@-3 dB < 0.5 nm
	Insertion Loss Uniformity (typ.)	dB	≤ 0.5	
	Return Loss	dB	≥ 40 (typ. ≥ 45)	
	Crosstalk (typ.)	dB	≥ 50	
Fiber	PDL (typ.)	dB	≤ 0.25	SMF
	Optical Fiber	-	SMF or PMF ^{*1}	
	Optical Connector	-	FC or SC	
Others	Optical Polish	-	SPC or APC	APC = Angled PC
	Dimensions (W) x (D) x (H)	mm	250 x 151 x 113	
	Weight	kg	3.5	

Wide type: BW 0.1 - 15 nm

Category	Parameter	Unit	Specification	Notes
Wavelength Characteristics	Wavelength Range	nm	1530 - 1610	
	Tuning Range	nm	80	
Filter Characteristics	Bandwidth @-3 dB	nm	0.1 to 15.0	
	Bandwidth @-20 dB	nm	≤ 0.4	Bandwidth@-3 dB = 0.1 nm
			≤ 15.5	Bandwidth@-3 dB = 15.0 nm
Power Characteristics	Group Velocity Dispersion	ps/nm	≤ ±1 (typ. ≤ ±0.2)	
	Maximum Input Power	dBm	+25	
	Insertion Loss	dB	≤ 5 (typ. ≤ 3.5)	Bandwidth@-3 dB ≥ 0.2 nm
			≤ 7	Bandwidth@-3 dB < 0.2 nm
	Insertion Loss Uniformity (typ.)	dB	≤ 0.5	
	Return Loss	dB	≥ 40 (typ. ≥ 45)	
	Crosstalk (typ.)	dB	≥ 50	
Fiber	PDL (typ.)	dB	≤ 0.25	SMF
	Optical Fiber	-	SMF or PMF ^{*1}	
	Optical Connector	-	FC or SC	
Others	Optical Polish	-	SPC or APC	APC = Angled PC
	Dimensions (W) x (D) x (H)	mm	250 x 151 x 113	
	Weight	kg	3.5	

*1: In case of PMF, Polarization extinction ratio 20 dB (typ.), Polarization axis in alignment with connector key.

Ordering Code

OTF-350 - A - B - C - D

Connector Polish : S : SPC / A : APC (Angled PC)
 Connector Type : FC : FC / SC : SC
 Fiber Type : S : SMF / P : PMF
 Filter Type : N : Normal type / W : Wide type

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