

Optical Tunable Filter OTF-320

The OTF-320 is a manually tunable optical filter that features a wavelength indicator. Tuning is achieved by rotating a dial on the side of the unit, and the meter on the top of the unit provides the wavelength reference. A wide choice of tunable filter wavelength range and profile are available from santec's selection of thin-film based filters.

Features

- ▶ 80nm tuning range
- ▶ Excellent transmission characteristics and low PDL and PMD over whole tuning range
- ▶ Analog wavelength indicator
- ▶ Wavelength tuning knob with lock function

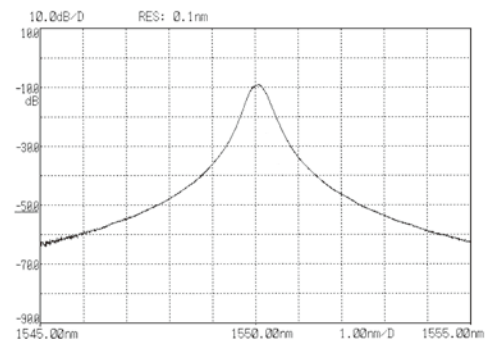
Applications

- ▶ DWDM transmission systems
- ▶ ASE noise suppression
- ▶ Incoherent light source
- ▶ Fiber sensing



Measurement Data

Bandwidth Type: 003
Filter Structure: S2



Bandwidth Type: 012
Filter Structure: S2

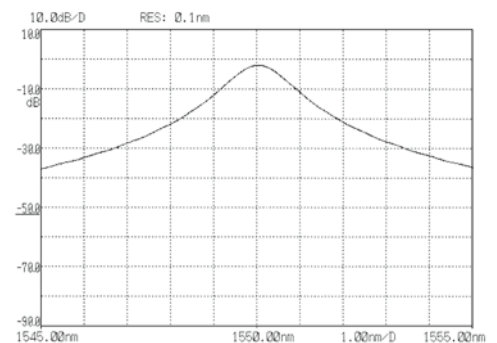


Table1. Optical Specifications

Parameter	Units	Performance		
Wavelength range	nm	1530 to 1610 or 1270 to 1350	1530 to 1570 or 1570 to 1610	1500 to 1630
Tuning range	nm	80	40	130
Insertion loss	dB	Ref. Table 2		
Bandwidth @-3dB	nm	Ref. Table 2		
Bandwidth @-20dB	nm	Ref. Table 2		
PDL	dB	<0.1 (single stage) / <0.2 (double / triple stage)		
Return loss	dB	>45		
Operating Temperature	°C	0 to +70		
Dimensions (Width x Depth x Height)	mm	171x38x38		

Table2. Filter Selection

Bandwidth Type	03			04			06		
	S1	S2	S3	S1	S2	S3	S1	S2	S3
Bandwidth @-3 dB (nm)	0.4±0.1	0.3±0.1	0.25±0.1	0.5±0.1	0.35±0.1	0.3±0.1	0.7±0.1	0.5±0.1	0.4±0.1
Bandwidth @-20 dB (nm)	<3.8	<1.5	<1.2	<5.0	<1.7	<1.2	<7.5	<2.4	<1.5
Insertion Loss (dB)	<3.0	<5.5	<7.0	<3.0	<5.0	<6.5	<2.0	<3.0	<4.0

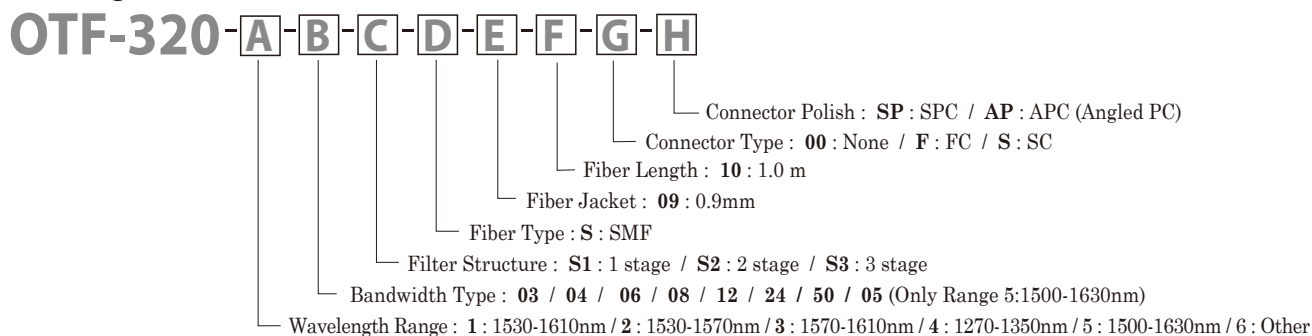
Bandwidth Type	08			12			24			50
	S1	S2	S3	S1	S2	S3	S1	S2	S3	S1
Bandwidth @-3 dB (nm)	0.95±0.1	0.65±0.1	0.5±0.1	1.3±0.1	0.9±0.1	0.7±0.1	2.9±0.3	1.95±0.3	1.5±0.3	5.5±1.0
Bandwidth @-20 dB (nm)	<9.8	<3.0	<2.2	<15.0	<4.5	<3.0	<32.0	<10.0	<6.5	<60(Typ.)
Insertion Loss (dB)	<2.0	<2.5	<3.0	<1.5	<2.0	<2.5	<2.0	<2.0	<2.5	<2.9

Bandwidth Type	05 (1500-1630nm)			12 (1270-1350nm)		
	S1	S2	S3	S1	S2	S3
Bandwidth @-3 dB (nm)	0.5±0.1	0.35±0.1	0.3±0.1	1.3±0.15	0.9±0.1	0.7±0.1
Bandwidth @-20 dB (nm)	<5.0	<1.7	<1.2	<15.0	<4.5	<3.0
Insertion Loss (dB)	<4.0 *1	<6.0 *1	<7.5 *1	<2.5	<3.0	<3.5

*1: The insertion loss at (1500 - 1530nm) and (1610 - 1630nm) wavelength range may increase by 1dB.

Please contact Santec's customer service to discuss any special requirements

Ordering Code



www.santec.com E-Mail : sales@santec.com

2014 © SANTEC CORPORATION Santec reserves the right to make changes in equipment design, components or specifications without notice.



SANTEC CORPORATION
5823 Ohkusa-Nenjoyozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-1959 Fax +81-568-79-1718

SANTEC U.S.A. CORPORATION
433 Hackensack Ave., Hackensack, NJ, 07601, U.S.A. Toll Free +1-800-726-8321 (santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

SANTEC EUROPE LIMITED
Magdalen Centre, Robert Robinson Ave., The Oxford Science Park, Oxford OX4 4GA, U.K. Tel. +44-1865-784960 Fax +44-1865-784961

SANTEC (SHANGHAI) Co., Ltd.
No.800 Zhangyang Road Changhang Tower, Pudong District, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263