

## Amplified Spontaneous Emission Noise Rejection Filter



### Key Features

- Thin film filter based
- Wideband signal transmission
- High level ASE noise rejection
- Low temperature dependent loss
- Epoxy-free optical path

### Applications

- Pre-amplifiers
- WDM in-line amplifiers

### Compliance

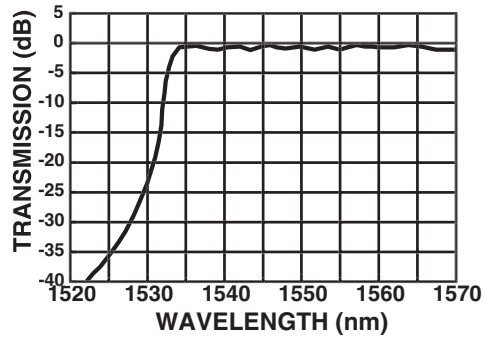
- Telcordia GR-1221

The JDSU amplified spontaneous emission (ASE) noise rejection filter uses interference filter technology to achieve wideband signal transmission and high level ASE noise rejection in erbium doped fiber amplifiers.

Stable and reliable, these high performance filters are ideal for pre-amplifier and wavelength division multiplexing (WDM) in-line amplifier applications.

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Performance (Model 1)



Specifications

Parameter		Model 1	Model 2	Model 3
Pass wavelength range $\lambda_P$		1535 to 1565 nm	1537 to 1565 nm	1544 to 1565 nm
Rejection wavelength range $\lambda_R$		1510 to 1530 nm	1510 to 1532 nm	1510 to 1538 nm
Insertion loss at $\lambda_P$	Maximum	0.6 dB	0.6 dB	0.6 dB
Flatness at $\lambda_P$	Maximum	0.3 dB	0.3 dB	0.3 dB
Isolation at $\lambda_R$	Minimum	20 dB	20 dB	20 dB
Optical return loss	Minimum	50 dB	50 dB	50 dB
Polarization dependent loss	Maximum	0.05 dB	0.05 dB	0.05 dB
Polarization mode dispersion	Maximum	0.1 ps	0.1 ps	0.1 ps
Temperature dependent loss	Maximum	0.1 dB	0.1 dB	0.1 dB
Optical Power	Maximum	500mW	500mW	500mW
Tensile load	Maximum	5 N	5 N	5 N
Operating temperature		-5 to 75 °C	-5 to 75 °C	-5 to 75 °C
Storage temperature		-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
Package dimensions (D x L)				
250 $\mu\text{m}$		5.5 x 30 mm (Standard) 3.2 x 30 mm (Miniature)	5.5 x 30 mm (Standard) 3.2 x 30 mm (Miniature)	5.5 x 30 mm (Standard) 3.2 x 30 mm (Miniature)
900 $\mu\text{m}$		5.5 x 40 mm (Standard) 3.2 x 40 mm (Miniature)	5.5 x 40 mm (Standard) 3.2 x 40 mm (Miniature)	5.5 x 40 mm (Standard) 3.2 x 40 mm (Miniature)
Fiber length		>1.0 m	>1.0 m	>1.0 m

**Ordering Information**

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

**Sample: FWS-200011000**

# FWS-2000

Code	Model
1	1535 to 1565 nm
2	1537 to 1565 nm
3	1544 to 1565 nm

Code	Fiber Type
1	250 $\mu$ m fiber
2	900 $\mu$ m fiber

Code	Optical Power
0	Standard power, 500 mW
1	High power, 2 W

Code	Package
0	Standard
1	Miniature

Code	Connector Type <sup>1,2</sup>
0	No connector
1	FC/SPC
2	FC/APC
3	SC/SPC
4	SC/APC
5	ST
6	LC/SPC

1. Connectors available only with 900  $\mu$ m fiber option.
2. Other connectors available upon request.