

Tunable Bandreject Filters

- 25 MHz to 2000 MHz
- Direct Readout
- Octave Tuning
- Digital and Manual Tuning Available
- Extended Passband
- High Power Application
- Custom Bandwidths
- Ruggedized Applications

Calculating Number of Sections

3NF-200/400-S

1 2 3 4

1. Number of Sections
2. Series (NF)
3. Frequency Range, MHZ
4. Connectors

Digital Filter Options

Smiths Interconnect can provide a wide selection of tunable bandpass and bandreject options, including digitally controlled filters. Standard bandpass and bandreject tuners can be configured to provide digital frequency control. Tuning is accomplished by utilizing a servo-type stepping motor to drive the gear assembly.

A programmable microprocessor-based system is used. Many control logic options exist including serial, RS-232, RS-422, IEEE-488, and BCD.

Bandwidth	Designator
3 dB	/(blank)
special	/X
Connectors	
Connector Type	Designator
BNC Female (1)	B
F	F
N Female	N
SMA Female	S
TNC Female (1)	T

Standard Cellular and PCS Tunable Bandreject Filters											
Part No.	No. of Sections	Freq. Range (MHz)	Insert. Loss dB (Typ.)	Nominal Bandwidth	VSWR	Avg. Power (Watts)	Dial Acc.	Notch Inch (mm)	Length Inches (mm)	Width Inches (mm)	Width Inches (mm)
Cellular Bandpass											
3NF-800/1000-S	3	800-1000	1	1%	1.5:1 TYP	50 W	±0.5%	50 DB	6.6 (167.6)	5.4 (137.2)	2.8 -71.1
5NF-800/1000-S	5	800-1000	1	1%	1.5:1 TYP	50 W	±0.5%	75 DB	6.6 (167.6)	5.4 (137.2)	2.8 -71.1
PCS Bandpass											
3NF-1800/2200-S	3	1800-2200	1	1%	1.5:1 TYP	50 W	±0.5%	50 DB	6.57" (166.9)	2.0" -50.8	2.0" -50.8
5NF-1800/2200-S	5	1800-2200	1	1%	1.5:1 TYP	50 W	±0.5%	75 DB	9.86" -250.4	2.0" -50.8	2.0" -50.8

Standard 3-Section Tunable Bandreject Filters							
Stock 3 Section Units	Insertion Loss dB (Typical)	3 dB BW (MHz)	40 dB BW min. (KHz)	Notch Depth (dB)	Length Inches (mm)	Width Inches (mm)	Height Inches (mm)
3NF-25/50-S	1	1-2.5	100	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-30/76-S	1	1-2.5	100	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-50/100-S	1	6-Mar	300	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-100/200-S	1	6-Mar	300	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-200/400-S	1	7-Mar	300	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-250/500-S	1	7-Mar	300	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-375/750-S	1	16-Jun	400	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-500/1000-S	1	16-Jun	400	50	6.6 (167.6)	5.4 (137.2)	2.8 (71.1)
3NF-1000/2000-S	1	24-Sep	400	50	5.2 (132.1)	2.9 (73.7)	2.8 (71.1)