



Description

Model NF7- (Fc)HQ is a fixed FM Narrow band bandpass filter, designed to pass a specific FM signal. Fc is user specified (Fo). NF7-FM HQ can be fine tuned, $F_o \pm 3$ MHz, via trimmers T1/T2 (see photo).

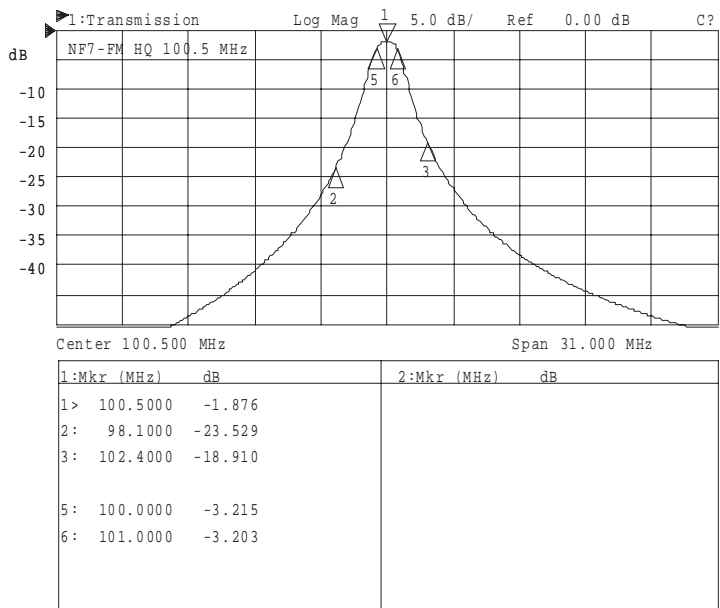
- Narrow Passband: < 0.75 MHz
- Passband insertion loss 2 to 3 dB at Fo
- Stopband >20dB: ± 2 -2.5 MHz from Fo
- Stopband >40 dB: 5 to 80 MHz, 118 to 250 MHz (or 5-1000 MHz with external lowpass).
- Best frequency tunable range $F_o \pm 3$ MHz
- Connectors: F type, 75 ohms (BNC 75 option)
- Connector 50 ohms options: BNC, N, or SMA



Specifications

Bandpass Frequency	Insertion Loss (dB)	VSWR	Return Loss (dB)	Attenuation (20dB)	-3dB Bandwidth (MHz)
88	2.75	1.67:1	18	± 1.75 MHz	0.75
99	2.75	1.67:1	18	± 1.75 MHz	0.75
108	2.75	1.67:1	18	± 2.0 MHz	0.75
Best Tune Range		$F_o \pm 3$ MHz			
Attenuation (>40dB)		5 to 80MHz and 118 to 250MHz			
RF power: 2 Watts		Dimensions (l/w/h): 4.25 x 1.75 x 4.0 (in), 10.5 x 4 x 10 (cm)			

Example Frequency Response



Bandpass Adjustments

For best results adjust with Network analyzer or similar type instrument. NF7 can be tuned to a higher or lower frequency by adjusting screw trimmers T1 and T2 (see below). Both resonators are tuned to same Fo for optimal response.



Turn Screw T1/T2 clockwise for lower Fo



Turn Screw T1/T2 counter-clockwise for higher Fo

Note:

Adjust with small movement of screw - 1/8 turn for fine tuning .

