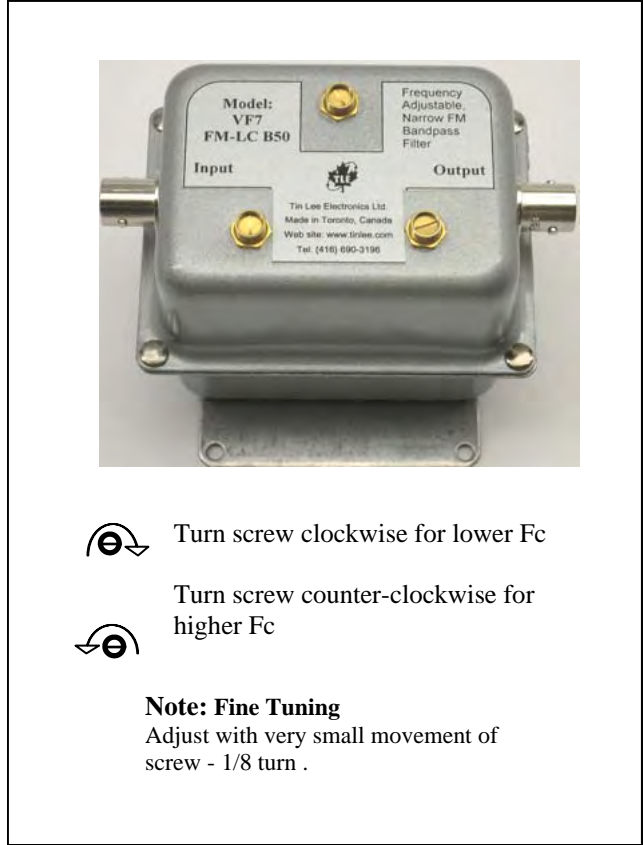




Description and Specifications

Model VF7-(Fc) LC is a low-cost, general purpose narrow band FM bandpass filter. It is frequency-tunable (factory preset at 99MHz). Its center frequency (Fc) can be tuned using three trimmers (from 88MHz to 108MHz).

- Narrow passband: < 0.5 MHz wide
- Passband: user-specified FM frequency (Fc)
- Operation bandwidth: 5 to 750 MHz
- Frequency-tunable FM bandpass, factory pre-tuned (99 MHz or user-specified).
- Tunable using three screw trimmers (88 to 108MHz)
- Stopband: see Table 1, below
- Connectors: F type, 75 ohms (standard)
Optional connections include: BNC (75 or 50 ohms); BNC, SMA, or N-type (50 ohms)



Bandpass Frequency	Insertion Loss (dB)	Return Loss (dB)	Attenuation (20dB)	-3dB Bandwidth (MHz)
88	3.5	12	±1.5MHz	1.00
99	2.5	20	±3MHz	1.25
108	2.75	12	±2.5MHz	1.25
Attenuation (>40dB)	5 to 80MHz & 118 to 1000MHz			

Bandpass Adjustments

For best results, adjust with instrumentation that provides a bandpass frequency response. VF7 can be tuned to a higher or lower frequency by adjusting screw trimmers T1 and T2 (see photo). Both resonators are tuned to the same Fc for optimal bandpass response.

Bandpass Adjustment with RF Level Meter - Adjust with small flathead screwdriver (e.g., R3324 XCELITE). Mark screwdriver shaft with tape and reference the screw position (tape on screwdriver shaft) with respect to the marking on the surface of the trap. When making adjustments note the original tuning position and amount of adjustment made. Measure for optimal signal level.

Caution: Screw trimmers are made of glass; do not tune screws beyond the range of the trimmer body. At the maximum and minimum ranges the screw will feel snug.