

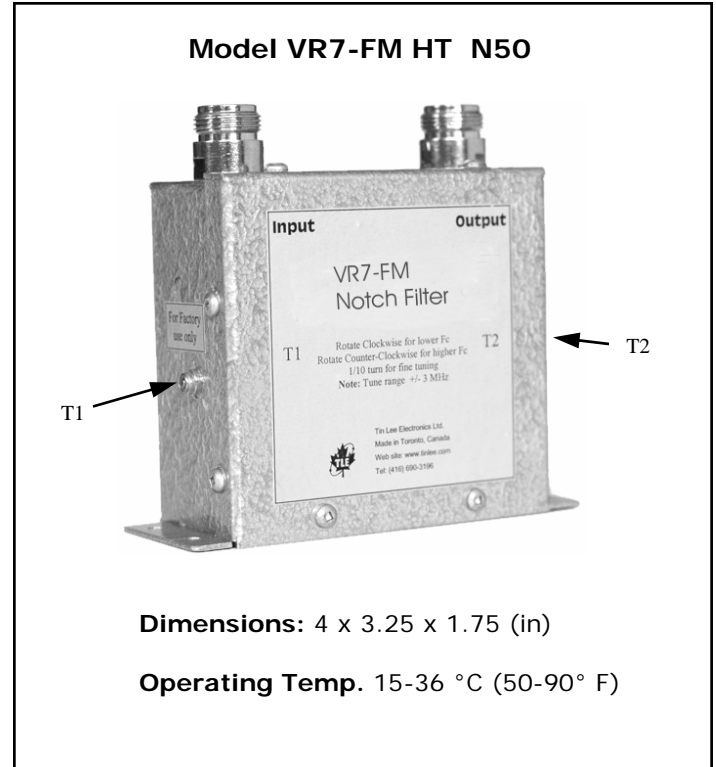


# VR7-FM HT

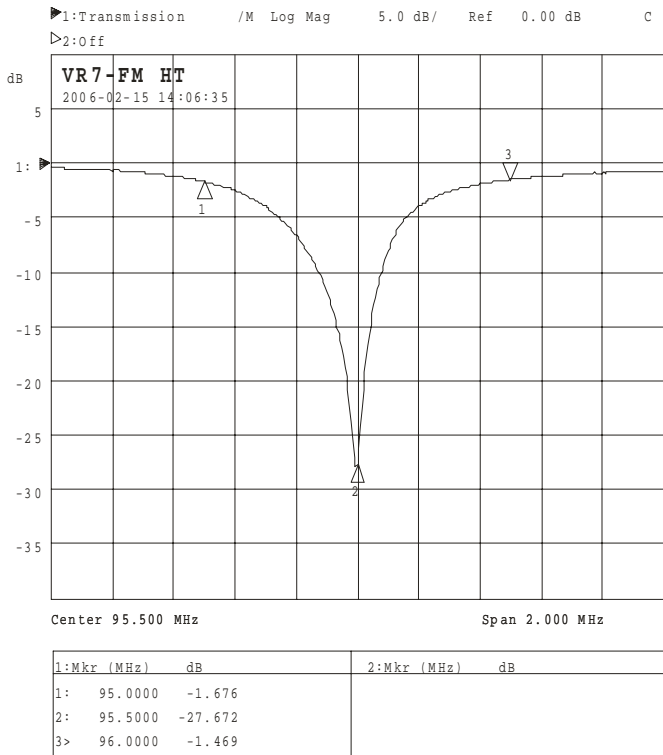
## Description and Specifications

Model VR7- FM HT is a frequency tunable FM notch. Its high selectivity allows rejection of FM signals as close together as 0.5 MHz with <1.5dB loss to adjacent signals. It consists of two HQ tunable resonators.

- Notch (Fo): factory preset 99 MHz or user specified
- Rejection: available from 20 dB to 40 dB
- Fo is tunable via two trimmers (see photo).
- Notch tuning range is 88 MHz to 108 MHz
- Optimal Tuning range is Fo ± 5 MHz
- Rejection of individual notch from 6dB to 12dB
- 3dB bandwidth ± 0.35 MHz (25dB notch)
- 3dB bandwidth ± 0.75 MHz (40dB notch)
- Passband: 50 MHz to 250 MHz
- 75 ohms F type connectors (standard)
- Connector Options (50 ohms): BNC, SMA, N
- RF Power handling: 1 watt max
- Graph supplied with this unit (sample below)



**Fig.1** Graph shows VR7-FM HT with 25 dB notch at 95.5 MHz (Fo) with 3 dB BW of ± 0.35 MHz (approx)Fo.



## Trap Adjustments



Turn Screw clockwise for lower Fo

Turn Screw counter-clockwise for higher Fo

**For best results** use an RF analyzer with sweep view of frequency response at 1 MHz span at Fo. Traps can be retuned to a higher or lower frequency by adjusting screw trimmers T1 and T2 (see photo).

**Trap Adjustment without suitable equipment is not recommended.**

**Coarse Adjustments** - Tune one notch at a time to Fo. Individual notch is factory pre-set between 6 to 10 dB attenuation. Fine tune T1 and T2 together to achieve optimum attenuation. Example: Two 10 dB notches (preset) provide >40 dB attenuation with 3 db BW of +/- 0.75 MHz Fo.

**Fine Tune** - To obtain optimum attenuation - alternately adjust each trap very slightly (1/10 T) in either direction, repeat until required notches resonate together at Fo for desired attenuation.

### Caution:

**Do not tune screws beyond the FM frequency range, the screws may be damaged.**

