



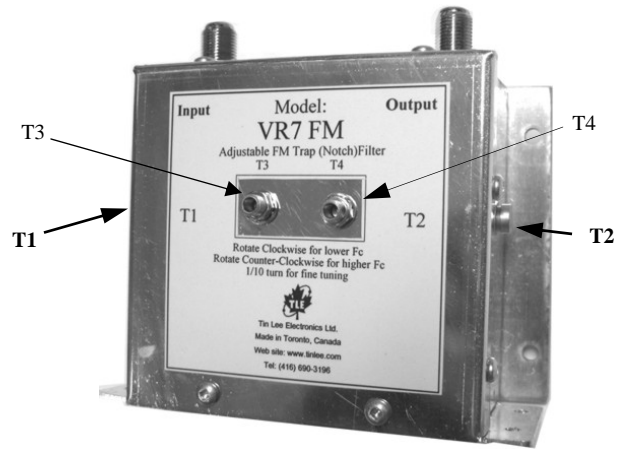
VR7-FM HT

Description and Specifications

Model **VR7-FM HT** is a frequency tuneable 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 which can be tuned to one frequency (Fo) for 25dB to 40dB attenuation.

- Notch Frequency (Fo) is preset @98 MHz or user specified
- Notch Attenuation is available from 20 dB to 40 dB
- Adjust T1 and T2 (see photo) to set Fo
- Fo tuning range: 88 MHz to 108 MHz
- Fo can be user specified frequency, attenuation and selectivity with "best" tunable range: Fo ± 5 MHz
- Rejection of individual notch from 8dB to 12dB
- 3dB bandwidth ± 0.35 MHz (specify 25dB notch)
- 3dB bandwidth ± 0.75 MHz (specify 40dB notch)
- Passband: 5 MHz to 250 MHz
- Standard Connector is F type, 75 ohms
- Optional Connectors: BNC, SMA, N—50 ohms
- RF Power handling: 1 watt max
- T3 and T4 allow fine tune of Fo ± 0.25 MHz for optimum or reduced attenuation level
- Graph supplied with this unit (sample below)

Model VR7-FM HT N50



Dimensions: 4 x 3.25 x 1.75 (in)
Operating Temp. 15-36 °C (50-90° F)

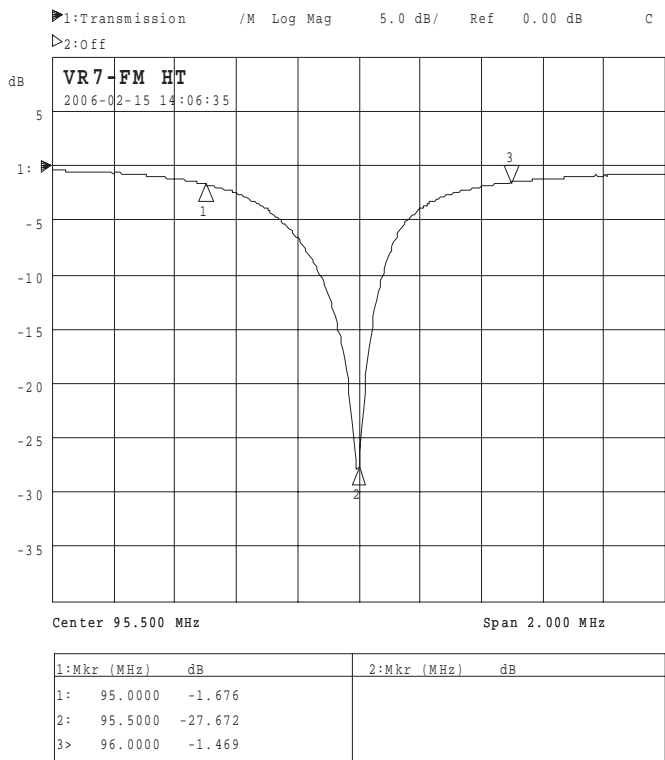
Order as VR7-FM HT, Specify Fo (MHz) (optional), attenuation (dB), Connectors/Impedance

Trap Adjustments – Use small flathead screw driver to adjust T1 and T2 screws to set notch frequency (see photo).

Turn Screw clockwise for lower Fo

Turn Screw counter-clockwise for higher Fo

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.



For best results use an RF analyzer or Spectrum analyzer with tracking generator to view frequency response.

Trap Adjustment with suitable equipment is recommended.

Frequency Adjustments - Span 20 MHz at Fo. Traps can be re-tuned to a higher or lower frequency by adjusting T1 and T2. Tip: turn screw by 1/10 turn. Adjust one notch at a time to Fo. Individual notch is factory pre-set between 8 to 11 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 - SPAN frequency response 3MHz at Fo. To obtain optimum, or , minimum attenuation –by adjusting screws T3 & T4. Slightly turn screws (1/10 T) in either direction, repeat until desired notch depth is achieved. **Note:** T3, T4 not intended for frequency adjustment. **Tip:** Use T3, T4 to **combine** or “off tune” Fo.

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

