



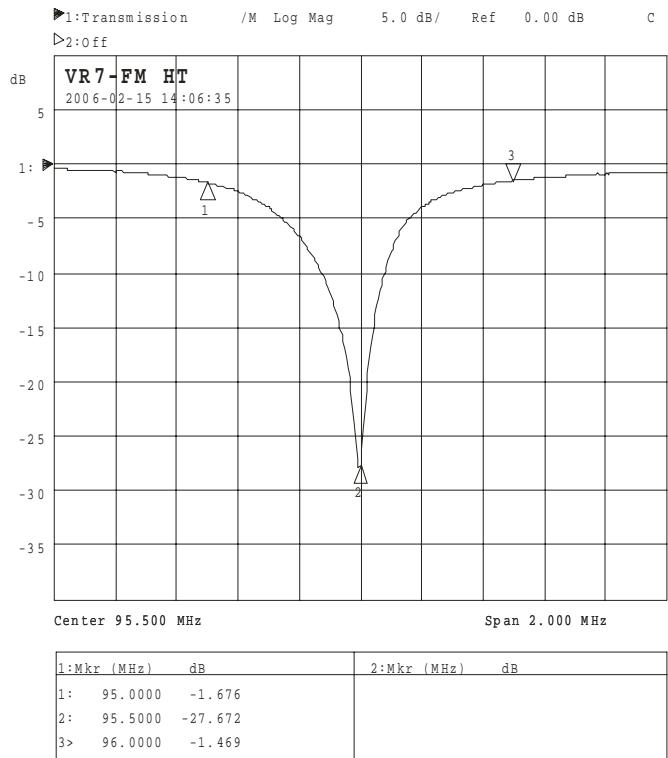
VR7-FM HT

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 $Fo \pm 5$ 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.



Model VR7-FM HT N50



Dimensions: 4 x 3.25 x 1.75 (in)

Operating Temp. 15-36 °C (50-90° F)

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.

