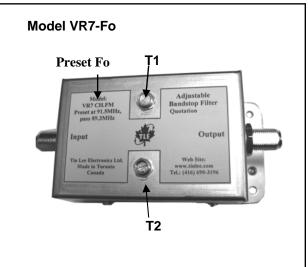


## **Description**

Model VR7-(Fo )HQ is a frequency tunable notch designed for VHF, FM, or CATV systems. Two tunable 8 to 10 dB notches (T1, T2) can be combined for 20, 30, or, 40dB rejection of an undesired single carrier (User can specify rejection value. Note: Notch with lower rejection generally provide greater selectivity).

Five models are available to cover a frequency range from 30 to 350 MHz \*. Trap frequency (Fo ) is factory preset, field tunable via two trimmers. Tuning range is typically: 20 MHz (Fo = 100 MHz); 30 MHz (Fo = 250 MHz)

- Rejection of combined notches 20 dB to 40 dB at (Fo)
- Rejection of individual notch from 8 to 12dB
- 3dB BW  $\pm$  1.0 MHz (Fo < 108 MHz, 30 dB notch)
- 3dB BW  $\pm$  1.5 MHz (Fo < 175 MHz, 30 dB notch)
- 3dB BW ± 2.0 MHz (Fo 175-300 MHz, 30 dB notch) \*
- Operating Bandwidth (MHz): 5 to 250 (option 870 MHz)
- Connectors F type connectors (75 ohms)
- Optional 50 ohms connectors: BNC, SMA, N
- RF Power handling: 1 watt (10 watt optional)
- Graph supplied with this unit to indicate trap preset frequency and operating bandwidth
- \* See model VR7-(Fo) HTU for notch frequency from 350 to 1000 MHz. High selectivity—3dB Bandwidth ±1.5-MHz with 35 dB suppression.



Turn Screw clockwise for lower Fo

Turn Screw counter-clockwise for higher Fo

## Note:

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

## **Trap Adjustments**

For best results adjust traps with RF analyzer with frequency response viewed at 6 MHz span at Fo. Traps can be tuned to a higher or lower frequency by adjusting screw trimmers T1 and T2 (see photo).

Trap Adjustment without equipment to view frequency response is not recommended.

Coarse Trap Adjustments - Tune one notch at a time to Fo e.g., tune screw T1 to desired trap frequency for 7-12 dB attenuation (approx.), then, tune T2 to the similar position - together T1 and T2 will provide approximately 25 to 45 dB attenuation.

Fine Trap adjustments - To obtain optimum attenuation - alternately adjust one trap very slightly (1/10 T) in either direction, then do the same with the other trap. Repeat until required notches resonate together at the required Fo for desired attenuation.

Caution: Do not tune screws beyond the intended frequency range. Do Not apply liquid adhesives to Tuning Screws.

