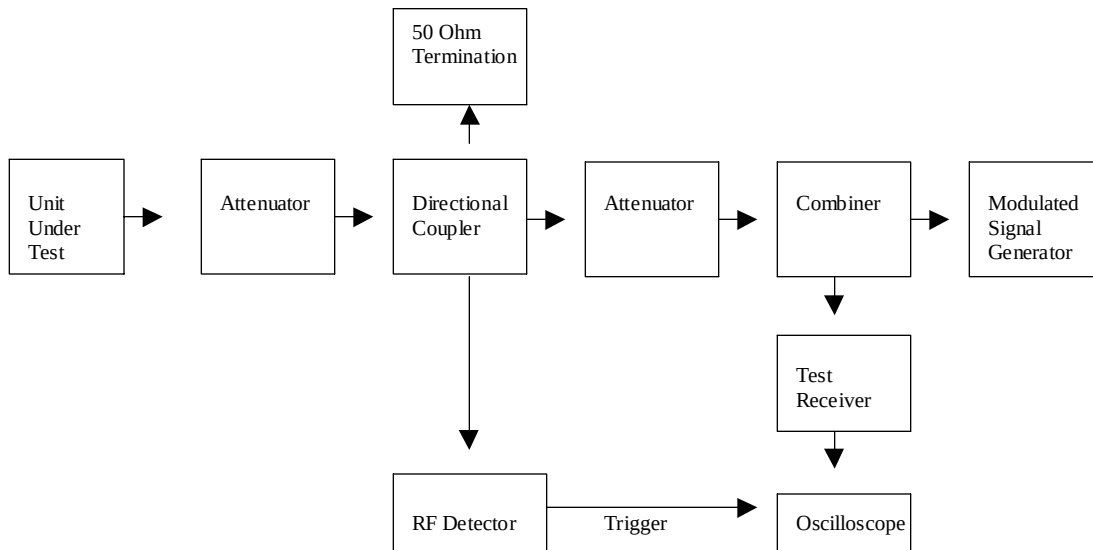


BLOCK DIAGRAM

Transient Frequency Behavior 90.214



The unit under test (IP9CST703) was connected to a Directional Coupler. The two outputs from the coupler were connected to a RF Detector Diode and the other output from the coupler was combined with a 25kHz FM modulated test signal. The output from the combiner was connected to a test receiver, the demodulated audio from the receiver was connected to the oscilloscope input and the external trigger input on the oscilloscope was connected to the output of the RF diode detector.

Power was applied to the test unit from a power supply, and the unit was turned OFF/ON manually with a test lead applied to the positive terminal of the power supply.

When power was applied to the unit under test, the microprocessor sends the frequency data to the PLL. The PLL outputs a voltage to the VCO to tune the oscillator to the programmed frequency, after the frequency is locked the output from the PLL (lock detect) turns on the power to the pre-driver and the final amplifier.

Three time periods were captured on the storage oscilloscope and recorded. The three pictures show the turn on and turn off points and the related frequency displacement. The t1,t2, and t3 mask limits are superimposed on each of the data runs.