

Feb. 6th, 2005

Subject:

1. DC voltages/currents supplied to the final RF amplifier for normal operation over the power range
2. Tune up procedure over the power range for transmitter as per FCC part 90

- 1) The following voltages/current are applied during “off” and “on” periods of the ASK modulation:

- a) when Tx data=0: $V_c=0V$, $V_b=0.3V$, $V_e=0V$, $I_c=0mA$, Q5 is closed;
 - b) when Tx data=1: $V_c=3V$, $V_b=1.6V$, $V_e=0.8V$, $I_c=11mA$, Q5 is open.
- Q5 refers to transistor HBFP0450 in schematics “RF” submitted.

- 2) Frequency is determined and stabilized by a SAW resonator.

A SAW filter at the transmitter output provides suppression of spurious out of band signals.

An RC network at the base of Q5 is used as a spectrum shaper.

The modulation is ASK with an on to off ratio of at least 20 dB. The voltages applied to Q5 define the 1dB compression point of the modulator and limit the output power to a maximum level of +6dB (see para. 1).

The unit does not have calibration means of output power.

Best Regards

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