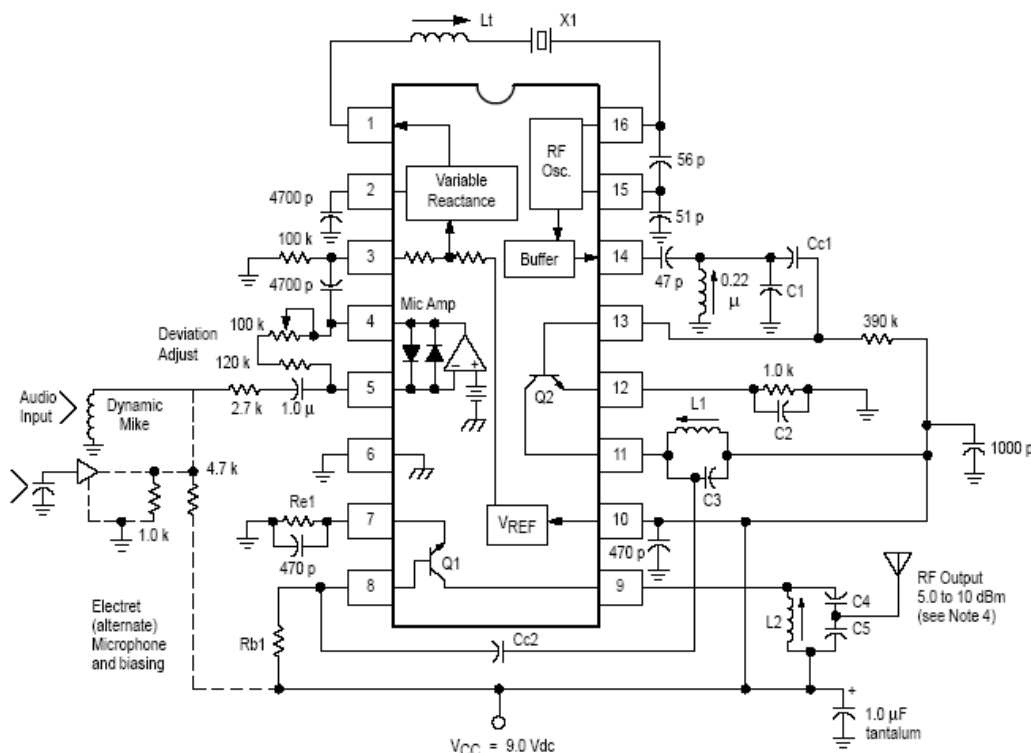


CX3VB – PROYECTOS DE ELECTRÓNICA

TRANSMISOR DE VHF (144.600 Mhz) CON UN ÚNICO CI MOTOROLA MC2833



NOTES:

1. Components versus output frequency:

Output RF	X1 (MHz)	Lt (μH)	L1 (μH)	L2 (μH)	Re1	Rb1	Cc1	Cc2	C1	C2	C3	C4	C5
49.7 MHz	16.5667	3.3-4.7	0.22	0.22	330	390 k	33 p	33 p	33 p	470 p	33 p	47 p	220 p
76 MHz	12.6000	5.1	0.22	0.22	150	300 k	68 p	10 p	68 p	470 p	12 p	20 p	120 p
144.6 MHz	12.05	5.6	0.15	0.10	150	220 k	47 p	10 p	68 p	1000 p	18 p	12 p	33 p

2. Crystal X1 is fundamental mode, calibrated for parallel resonance with a 32 pF load. The final output frequency is generated by frequency multiplication within the MC2833 IC. The RF output buffer (Pin 14) and Q2 transistor are used as a frequency tripler and doubler, respectively, in the 76 and 144.6 MHz transmitters. The Q1 output transistor is a linear amplifier in the 49.7 MHz and 76 MHz transmitters, and a frequency doubler in the 144.6 MHz transmitter.

3. All coils used are 7 mm shielded inductors, CoilCraft series M1175A, M1262A-M1289A, M1312A or equivalent.

4. Power output is $\approx +10$ dBm for 49.7 MHz and 76 MHz transmitters, and $\approx +5.0$ dBm for the 144.6 MHz transmitter at $V_{CC} = 8.0$ V. Power output drops with lower V_{CC} .

5. All capacitors in microfarads, inductors in Henries and resistors in Ohms unless otherwise specified.

6. Other frequency combinations may be set-up by simple scaling of the 3 examples shown.

Si desea imprimir el circuito impreso, deberá visualizar en ACROBAT READER con un tamaño del 100% luego copia el dibujo del impreso y lo pega como nueva imagen en PAINT para su posterior impresión, la cuál quedará en tamaño real.

Lado soldaduras

Lado componentes

Posición de los componentes

