Circuit Description

Model no.:TK5

The 26 MHz crystal oscillator drives the base of <u>IC U3</u> the final/buffer amplifier. The modulation provided by <u>U3</u>. The output of <u>U3</u> has the matching network consisting of <u>U3 RFLP LFB212G45BA1A220</u> and <u>L1,C1,C2</u> that limit the harmonic content and effect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a PCB antenna

There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 3.7 Volt ("4.0mm*20mm*40mm" size battery280mAH) primary battery

Operation Descriptions

The transmitter is a <u>Bluetooth radio</u> operating at <u>2400</u>MHz ISM band. The transmitter is powered by a <u>3.7V</u> battery (<u>"3.5mm*25mm" size battery 145mAH</u>) and the transmitting frequency is controlled by crystal and U3. The operation is achieved by different combinations of form <u>pulse / amplitude / frequency</u> modulating signal on the 3MHz bandwidth and 2402—2480 carrier frequency.

Remarks:

The transmitter is a <u>button</u> transmitter. The EUT continues to transmit while <u>button</u> is being pressed. It is <u>button</u> transmitter, Modulation by <u>U3</u>; and type is <u>GFSK</u> modulation.