Product Description

The A-FOUR TECH Co., Ltd. Model 080 00 0023(referred to as the EUT in this report) The EUT is an short range, lower power, wireless Keyboard system designed as an " Input Device. It is designed by way of utilizing the FSK modulation achieves the system operating.

Details of technical specification for EUT, refer to the follows:

(1) Transmitter Frequency Designation

Operating Frequency Range : 26.96 MHz to 27.28 MHz

Frequency Band : 27.095 , 27.195(in MHz)
2 channels, selectable. Channel setting by dip switch.

Frequency Tolerance : ± 5 KHz @ center frequency for each channel.

Channel Separation : 100 KHz

(2) Effective Radiated Power and Distance
Radiated Power : 1 mW max.

(3) Power Rating
Keyboard: 3V , 30 mA(Max.)

(4) Operation Methodology
The keyboard encoder generates a pulse code serially transmit (typical designation) into the modulator(or called as mixer) stage in circuit. This pulse signal mixed with the carrier at modulator(mixer) stage by way of FSK mode frequency modulation. The modulation depth is designed such as ± 5KHz in this application, that means the pulse(may be at high level state or low level state) will trigger the oscillator to generate a frequency at a specified fundamental frequency +5KHz or −5KHz, depended on the designation. For example, if the carrier frequency defined as fundamental frequency +5KHz at high level state, then the alternative carrier frequency will be fundamental frequency −5KHz at low level state.

Then the modulator(mixer) will output a modulated signal into RF amplifier stage and finally to the transmit antenna.