**MODEL: 34401** 

**FCC ID: TXL34401** 

IC: 6335A-34401

## OPERATIONAL DESCRIPTION

The 34401 is a small sensor for use in a wireless alert system. It is battery powered using a 3V CR123A size battery. It measures approximately  $1\frac{1}{2} \times 3\frac{1}{4} \times 1$  inches and weighs approximately 2 ounces.

It transmits packets for the purpose of alerting a user when a mailbox door, a standard door or window have been opened using either an on board magnetic reed sensor, an on board tilt sensor, or an off board device wired to two on board terminals. A microcontroller monitors the input of only one of the previously mentioned sensors configured for use by shorted or opened jumper circuits together with the associated circuitry. When a valid state change of the chosen sensor has been detected, the microcontroller transmits eight data packets. In the absence of external activations, a group of three supervision transmissions are sent once per hour. The transmitter circuit consists of a 433.92MHz SAW resonator, an oscillator transistor, an amplifier transistor, and associated passives. The amplifier stage is turned on and off to modulate the carrier. A bar antenna radiates the RF signal. The transmitted packet is ASK modulated and has an on-time of 9.6ms. Precautions are taken in the firmware to ensure that there is at least 100ms between packets.