

## **CIRCUIT DESCRIPTION**

**Device:** WLS912L-433 Lithium Glass Break Detector

**Model:** WLS912L (UA261)

**ESI Identifier:**

**Description:**

The lithium Glass Break Detector sends the sensor status appropriately to the control unit of the wireless security system. A sensor is incorporated to sense the frequency of a broken glass.

This unit consists of Three main circuit sections. A control section with a microprocessor, a digital controls sensor section and the RF transmitter.

The control section receives status information from the sensor inputs triggered by detecting the frequency pitch when a glass is brake and distinguishing its direction. The information is then coded to produce ASK modulation signal. This section also controls transmitter activity.

The transmitter consist of an integrated chip fully implemented with a phase locked loop (PLL) ,divide-by-64 prescaler, a phase detector, a voltage controlled oscillator, and an automatic lock detect that disables the transmitter output when the PLL is out of lock. The external reference crystal frequency provide a complete phase-locked detector which when divide-by-64 produce the output signal frequency of 433.92MHz compensated with a matching network to antenna.