

FOB101A Circuit Description

- The FOB101A circuit uses ASK/OOK modulation.
- The RF frequency is between 417.85 MHz and 418.15 MHz, with a preferred operating frequency of 418 MHz.
- The FOB101A transmits a unique 20-bit code every 10 seconds that is received and validated by a receiver unit which has been programmed to respond to the unique code. If the code is not received, then the receiver alarms to alert the caregiver. The fob is enabled by insertion of a coin-cell battery into the on-board battery holder and works automatically and continuously until the battery is extinguished (approximately 90-100 days). The microcontroller provides the timing and data bit stream comprising the unique code. The data stream is output to the ASK/OOK modulator and the modulated signal is transmitted through the antenna.