



Integrated Display Technology Ltd.

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Technical descriptions of EMR899HG

EMR899HG is basically a remote-thermo receiver. It is composed of two main parts that are control part and remote-thermo part. The remote-thermo part is a receiver whose centre frequency is 433.92 Mhz.

The remote-thermo part employs superregenerative receiver technique. The LC circuitry, L2, C2, C6 and C4 provides channel selection and the resonant frequency is set to 433.92 MHz. By extracting the emitter output of the transistor, Q2, a regenerated signal is obtained. The circuitry, C7 and R10, acts as a low pass filter which extracts the envelope of the regenerated signal. Demodulated signal is obtained from the output port of operational amplifier, pin 1 of LMV358. The other part of LMV358 composes a schmitt-trigger circuitry that converts the demodulated signal into pulses that can be read by micro-controller.