

Theory of operation statement on "NJR4170"

This product is an X-Band motion detector module applied for intrusion alarm sensors that utilizes the doppler shift phenomenon.

The basic principle of operation is to detect the frequency shift between a transmitted signal and received signal reflected back from a moving object within the field of view of the unit; a intrusion alarm sensor.

This product consists of a dielectric resonator stabilised MMIC oscillator and a balanced mixer for enhanced sensitivity.