

DATA SHEET Communications

XR2207

Voltage-Controlled Oscillator

Features

- Excellent Temperature Stability (20ppm/°C)
- Linear Frequency Sweep
- Adjustable Duty Cycle (0.1% to 99.9%)
- Two or Four Level FSK Capability
- Wide Sweep Range (1000:1 Minimum)
- Logic Compatible Input and Output Levels
- Wide Supply Voltage Range
- Low Supply Sensitivity (0.1% /V)
- Wide Frequency Range (0.01Hz to 1MHz)
- Simultaneous Triangle and Squarewave Outputs

Applications

- FSK Generation
- Voltage and Current-to-Frequency Conversion
- Stable Phase-Locked Loop
- Waveform Generation Triangle, Sawtooth, Pulse, Squarewave
- FM and Sweep Generation

The XR2207 is a monolithic voltage-controlled oscillator (VCO) integrated circuit featuring excellent frequency stability and a wide tuning range. The circuit provides simultaneous triangle and squarewave outputs over a frequency range of 0.01Hz to 1MHz. It is ideally suited for FM, FSK, and sweep or tone generation, as well as for phase-locked loop applications.

The XR2207 has a typical drift specification of 20ppm/°C. The oscillator frequency can be linearly swept over a 1000:1 range with an external control voltage; and the duty cycle of both the triangle and the squarewave outputs can be varied from 0.1% to 99.9% to generate stable pulse and sawtooth waveforms.