



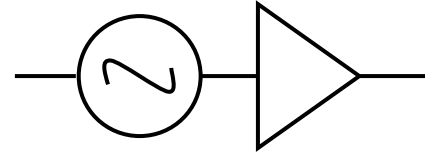
Voltage Controlled Oscillator

RJVC01

Description

RJVC01 is 0.5 - 1.15 GHz, voltage controlled oscillator. It can operate at 1.2 V supply and consumes only 2.5 mA current. The tuning bandwidth of the oscillator is 650 MHz with good phase noise performance.

Functional Diagram



The RJV01 have designed on the CMOS 0.18 um Process. The die area is very small.

Applications

CDMA
WLAN

Key Features

Large tuning bandwidth
Low cost, low power
Good phase noise
Small Size

Electrical Specification

Conditions: Vcc = 1.2 V, V tune = 0.8-1.5 V & TA=25 °C

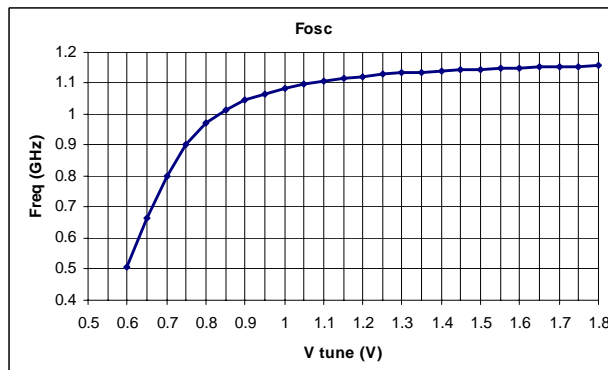
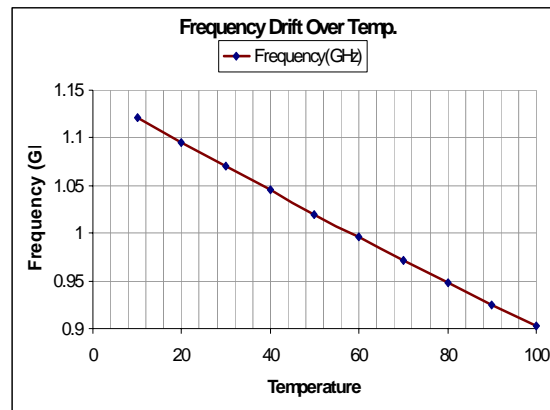
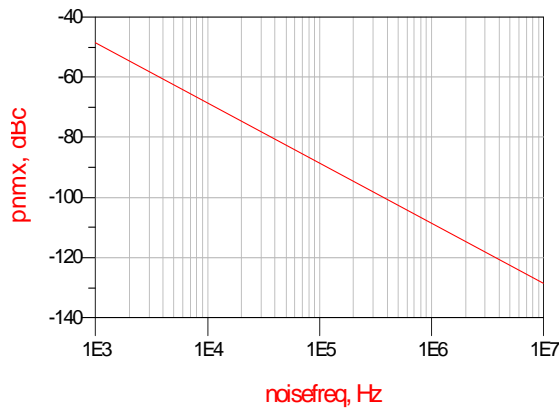
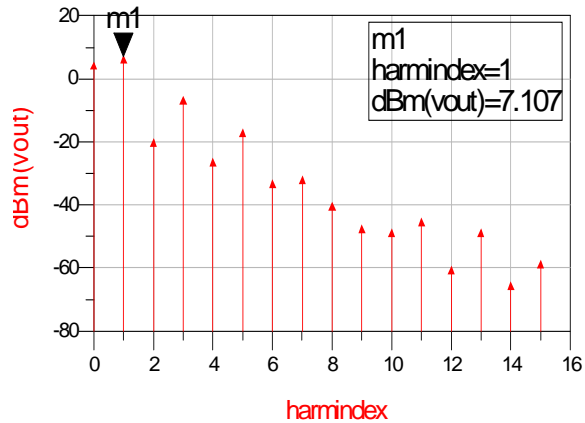
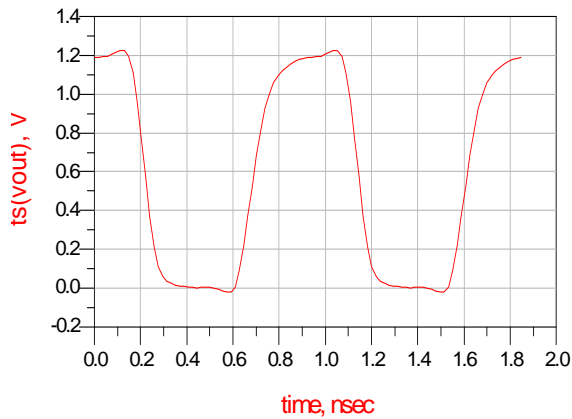
Parameter	Min	Typical	Max	Comment	Units
Frequency	0.5		1.15		GHz
Vout		717			mV
Phase Noise @ 100 kHz		-90			dBc/Hz
Tuning bandwidth		650			MHz
Tuning Sensitivity		30			MHz/V
Frequency Pushing		700			MHz/V
Supply Voltage		1.2			V
Tuning Voltage	0.8		1.5		V



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Simulated Results





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Layout

