

# VOLTAGE CONTROLLED OSCILLATOR

**TOM9300**  
25 - 50 MHz

## Available as:

TOM9300, 4 Pin TO-8 (T4)  
TON9300, 4 Pin Surface Mount (SM3)  
TOP9300, 4 Pin Flatpack (FP4)  
BXO9300, Connectorized Housing (H1)

## Features

- Low Noise Bipolar Transistor
- Broad Tuning Range
- Operating Case Temp. -55 °C to + 85 °C
- Environmental Screening available

## Specifications

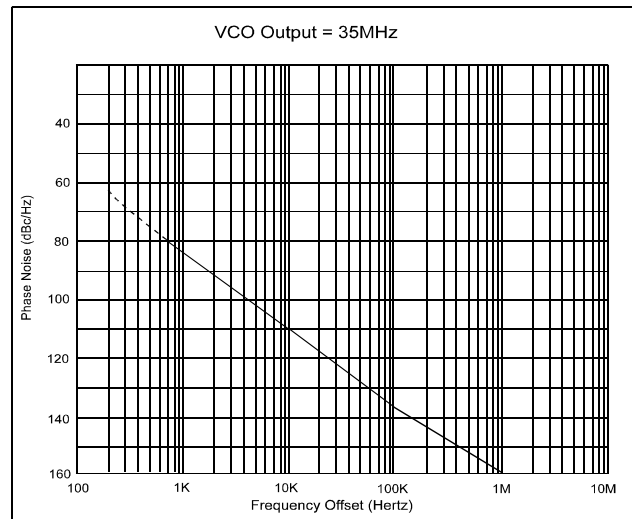
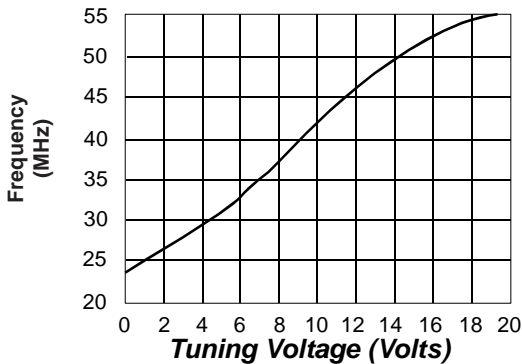
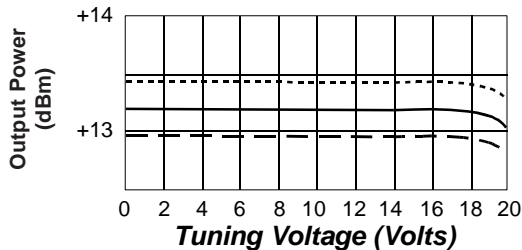
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °C
Frequency	25 - 50 MHz	25 - 50 MHz
Output Power (dBm)	+13	+10 Min.
Power Flatness (dB)	±0.5	± 1.0 Max.
Tuning Voltage Range (v)	1 to 15	0 to 20
Tuning Voltage Sensitivity (MHz/V)	2.0	1.0 Min.
Harmonics (dBc)	-15	-10 Max.
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohm	--	.1 MHz Min.
Pushing (MHz/V)	.20	.30 Max.
Pulling (MHz); 12dB RL	1.25	2.0 Max.
Frequency Drift (MHz/°C)	--	-.01 Max.
Power	Vdc	+15
	mA	13
		16 Max.

## Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
Storage Temperature ..... -62°C to + 125 °C  
Case Temperature ..... + 125 °C  
DC Voltage ..... + 20 Volts  
Maximum DC Tuning Voltage ..... + 20 Volts  
Minimum DC Tuning Voltage ..... 0 Volts

Note: Care should always be taken to effectively ground the case of each unit.

## Typical Performance Data



### Notes:

1. Phase Noise is measured using the Aeroflex PN9000.
2. Worst case phase noise @ 100KHz offset across frequency range and temperature extremes is -130 dBc/Hz.

Legend ——— + 25 °C - - - - +85 °C - - - - -55 °C



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