

# VOLTAGE CONTROLLED OSCILLATOR

**TOM9305**  
200 - 400 MHz

## Available as:

TOM9305, 4 Pin TO-8 (T4)  
TON9305, 4 Pin Surface Mount (SM3)  
TOP9305, 4 Pin Flatpack (FP4)  
BXO9305, Connectorized Housing (H1)

## Features

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

## Specifications

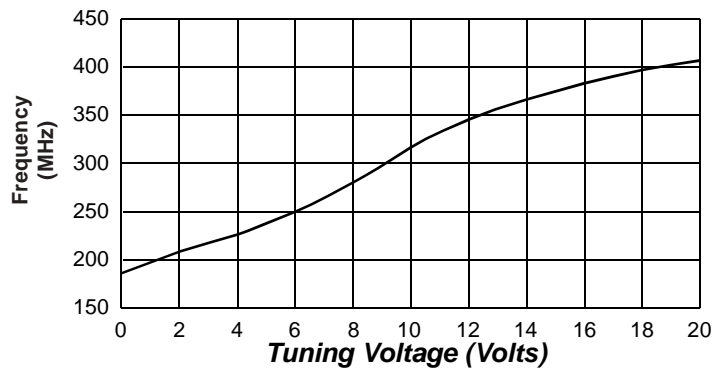
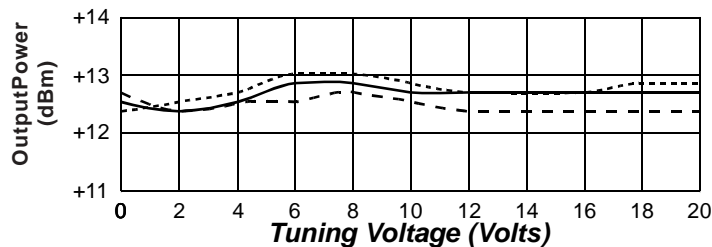
CHARACTERISTIC	TYPICAL Ta = +25°C	MIN/MAX Ta = -55°C to +85 °C
Frequency	200 - 400 MHz	200 - 400 MHz
Output Power (dBm)	+12.5	+10.0 Min.
Power Flatness (dB)	±0.4	±1.0 Max.
Tuning Voltage Range (v)	1 to 19	0 to 20
Tuning Voltage Sensitivity (MHz/V)	20	5.0 Min.
Harmonics (dBc)	-30	-17 Max.
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohms	---	3 MHz Min.
Pushing (MHz/V)	1.0	2.0 Max.
Pulling (MHz); 12 dB RL	4	9.0 Max.
Frequency Drift (MHz/°C)	---	0.1 Max.
Power Vdc	+15	+15
mA	14	18 Max.

## Maximum Ratings

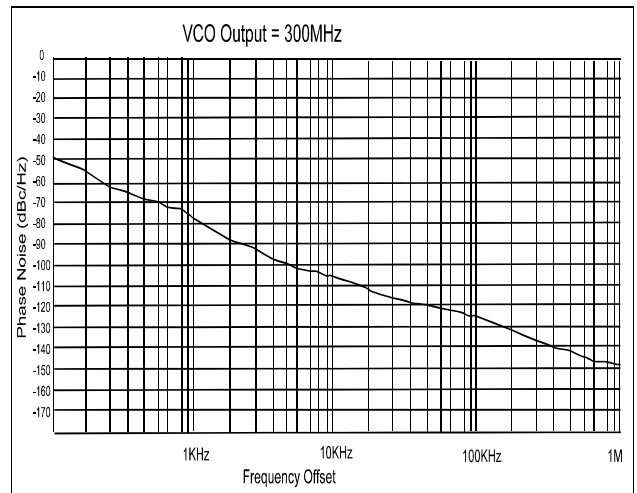
Ambient Operating Temperature ..... -55°C to + 100 °C  
Storage Temperature ..... -62°C to + 125 °C  
Case Temperature ..... + 125 °C  
DC Voltage ..... + 20 Volts  
Maximum DC Tuning Voltage ..... + 20 Volts  
Minimum DC Tuning Voltage ..... 0 Volt

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

## Typical Performance Data



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



### Notes:

1. Phase Noise is measured using the Aeroflex PN9000.
2. Worst case phase noise @ 100KHz offset across frequency range and temperature extremes is -120dBc/Hz.



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