

# VOLTAGE CONTROLLED OSCILLATOR

**TOM9090**  
900 - 1600 MHz

## Available as:

TOM9090, 4 Pin TO-8 (T4)  
TON9090, 4 Pin Surface Mount (SM3)  
TOP9090, 4 Pin Flatpack (FP4)  
BXO9090, Connectorized Housing (H1)

## Features

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

## Specifications

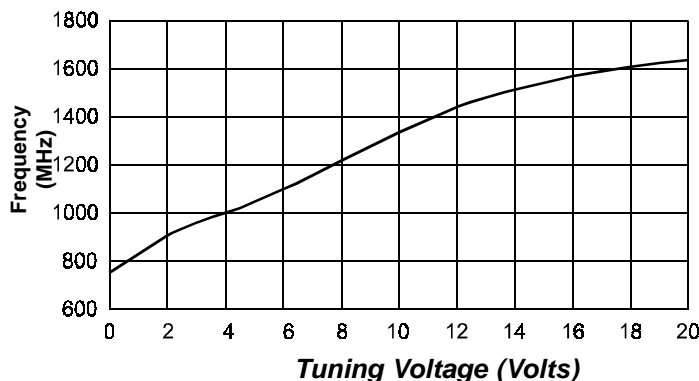
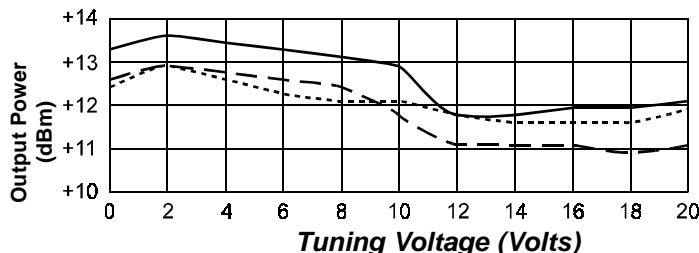
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	900 - 1600 MHz	900 - 1600 MHz
Output Power (dBm)	+11.5	+10.0 Min.
Power Flatness (dB)	±1.0	±2.0 Max.
Tuning Voltage Range (v)	2 to 18	0 to 20
Tuning Voltage Sensitivity (MHz/V)	20	15 Min.
Harmonics (dBc)	-14	-10 Max.
Spurious (dBc)	<-80	-60 Max.
3dB Modulation BW, Zg = 50 Ohms	—	10MHz Min.
Pushing (MHz/V)	2.0	3.0 Max.
Pulling (MHz); 12 dB RL	25	30 Max.
Frequency Drift (MHz/°C)	—	0.3 Max.
Power	Vdc mA	+15 35.0

## Maximum Ratings

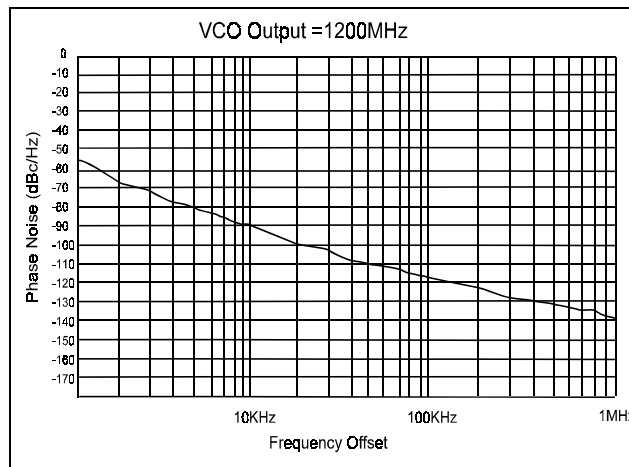
Ambient Operating Temperature ..... -55°C to + 100 °C  
Storage Temperature ..... -62°C to + 125 °C  
Case Temperature ..... + 125 °C  
DC Voltage ..... + 20 Volts  
Maximum DC Tuning Voltage ..... + 20 Volts  
Minimum DC Tuning Voltage ..... 0 Volts

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

## Typical Performance Data



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 -110 dBc/Hz.

# AMPLIFONIX

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