

VOLTAGE CONTROLLED OSCILLATOR

TOM9309
400 - 800 MHz

Available as:

TOM9309, 4 Pin TO-8 (T4)
TON9309, 4 Pin Surface Mount (SM3)
TOP9309, 4 Pin Flatpack (FP4)
BXO9309, Connectorized Housing (H1)

Features

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

Specifications

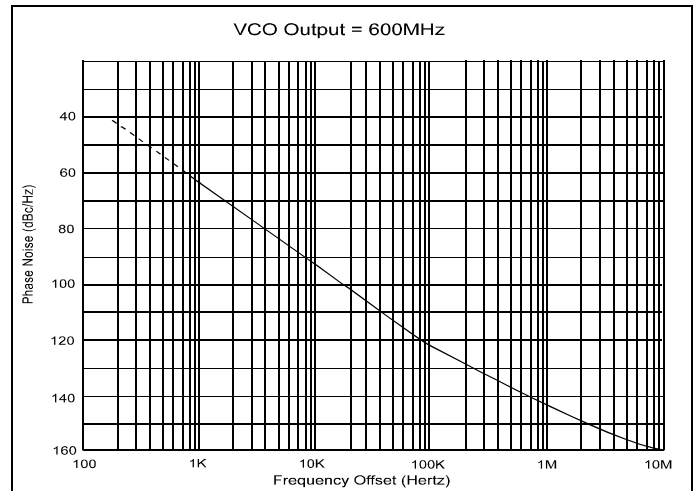
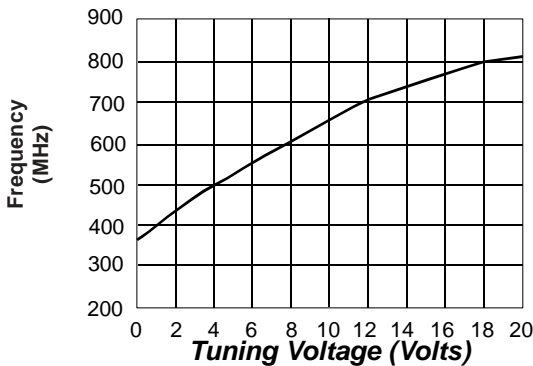
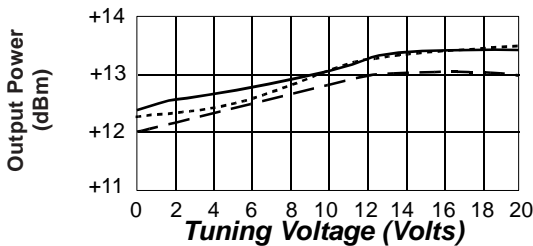
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °C
Frequency	400 - 800 MHz	400 - 800 MHz
Output Power (dBm)	12	10 Min.
Power Flatness (dB)	±1	±2 Max.
Tuning Voltage Range (v)	1 to 18	0 to 20
Tuning Voltage Sensitivity (MHz/V)	25	10 Min.
Harmonics (dBc)	-15	-10
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohm	---	10 MHz Min.
Pushing (MHz/V)	1	4 Max.
Pulling (MHz); 12dB RL	10	25 Max.
Frequency Drift (MHz/°C)	---	-.07 Max.
Power	Vdc	+15
	mA	18
		+15
		25 Max.

Maximum Ratings

Ambient Operating Temperature -54°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 -118 dBc/Hz.

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



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