

VOLTAGE CONTROLLED OSCILLATOR

TOM9301

40 - 80 MHz

Available as:

TOM9301, 4 Pin TO-8 (T4)
TON9301, 4 Pin Surface Mount (SM3)
TOP9301, 4 Pin Flatpack (FP4)
BXO9301, Connectorized Housing (H1)

Features

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

Specifications

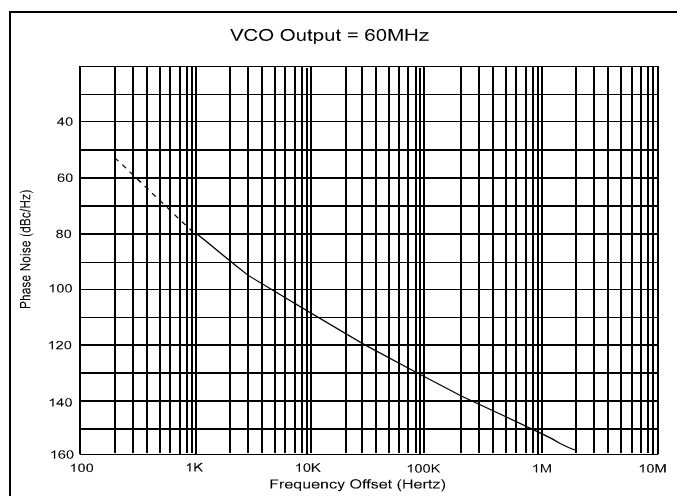
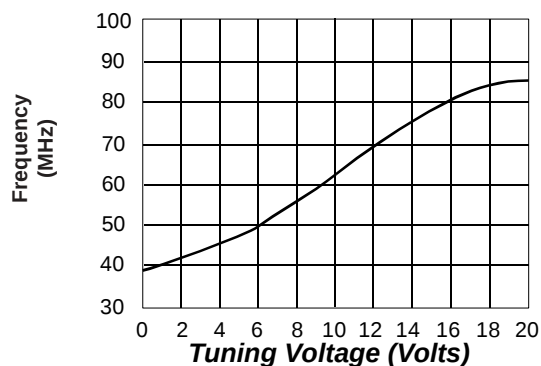
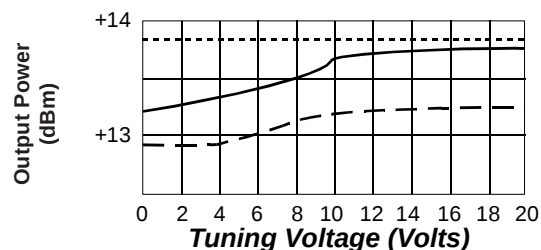
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = -55 °C to + 85 °C
Frequency	40 MHz	80 MHz
Output Power (dBm)	+13	+10 Min.
Power Flatness (dB)	±0.6	±2.0 Max.
Tuning Voltage Range (v)	1 to 17	0 to 20
Tuning Voltage		
Sensitivity (MHz/V)	2.5	1.0 Min.
Harmonics (dBc)	-13	-10 Max.
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohm	—	.2 MHz Min.
Pushing (MHz/V)	0.3	1.0 Max.
Pulling (MHz); 12dB RL	2	4 Max.
Frequency Drift (MHz/°C)	—	.02 Max.
Power		
Vdc	+15	+15
mA	14	18 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 -125 dBc/Hz.

Legend ——— + 25 °C - - - - +85 °C - - - - -54 °C



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 02/15/05

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001