

# VOLTAGE CONTROLLED OSCILLATOR

## TOM9303 100 - 200 MHz

### Available as:

- TOM9303, 4 Pin TO-8 (T4)
- TON9303, 4 Pin Surface Mount (SM3)
- TOP9303, 4 Pin Flatpack (FP4)
- BXO9303, Connectorized Housing (H1)

### Features

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

### Specifications

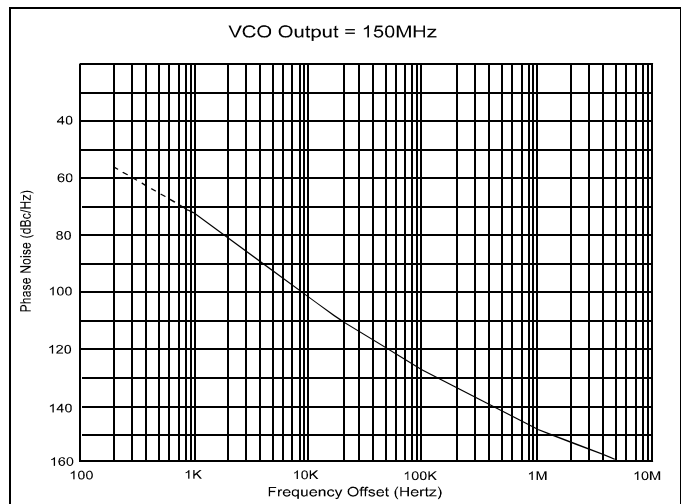
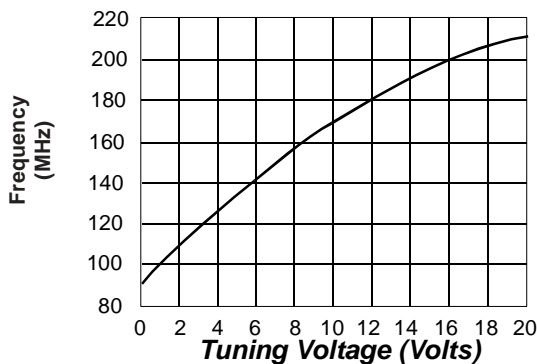
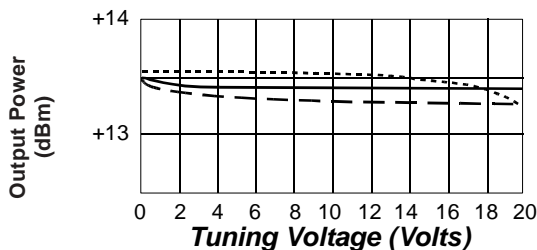
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °C
Frequency	100 - 200 MHz	100 - 200 MHz
Output Power (dBm)	13	+10 Min.
Power Flatness (dB)	±1	±2.0 Max.
Tuning Voltage Range (v)	1 to 17	0 to 20
Tuning Voltage Sensitivity (MHz/V)	6	2 Min.
Harmonics (dBc)	-13	-10 Max.
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohm	---	.5 MHz Min.
Pushing (MHz/V)	1	2.0 Max.
Pulling (MHz); 12dB RL	5	10 Max.
Frequency Drift (MHz/°C)	---	.07 Max.
Power	Vdc	+15
	mA	15
		20 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



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