

# VOLTAGE CONTROLLED OSCILLATOR

## TOM9315

1550 - 1800 MHz

### Available as:

TOM9315, 4 Pin TO-8 (T4)  
TON9315, 4 Pin Surface Mount (SM3)  
TOP9315, 4 Pin Flatpack (FP4)  
BXO9315, Connectorized Housing (H1)

### Features

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

### Specifications

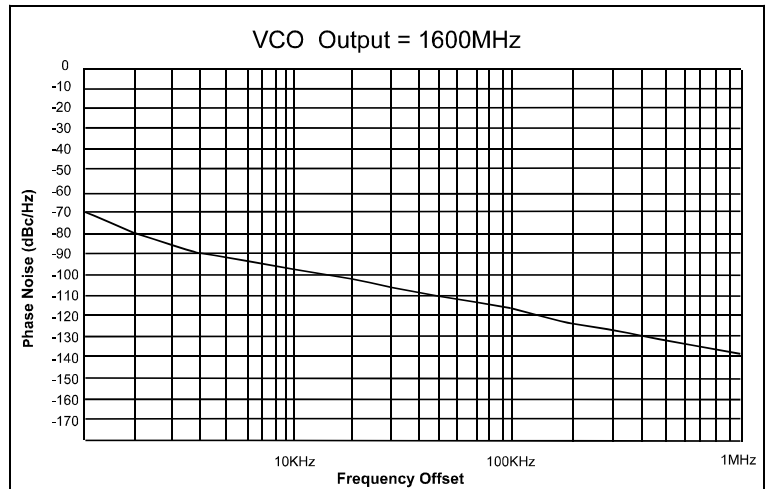
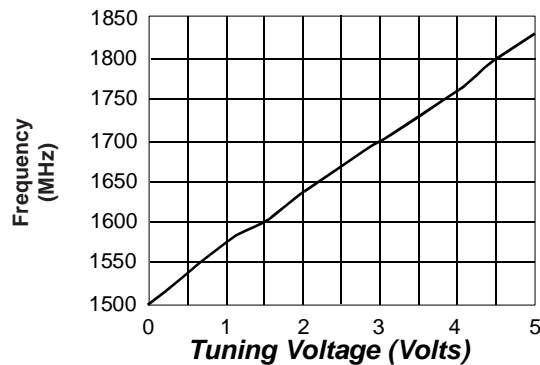
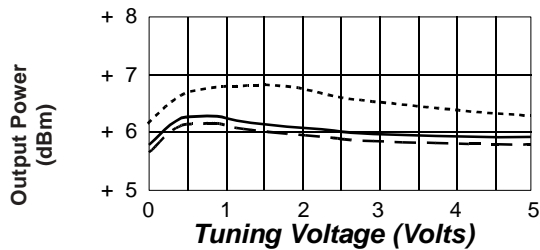
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX Ta = - 55 °C to + 85 °C
Frequency	1550 - 1800 MHz	1550 - 1800 MHz
Output Power (dBm)	+7.0	+5 Min.
Power Flatness (dB)	±1.0	±1.5 Max.
Tuning Voltage Range (v)	1 to 4.5	0 to 5
Tuning Voltage Sensitivity (MHz/V)	65	50 Min.
Harmonics (dBc)	-20	-10 Max.
Spurious (dBc)	<-80	-80 Max.
3dB Modulation BW, Zg = 50 Ohm	---	10 MHz Min.
Pushing (MHz/V)	4	10 Max.
Pulling (MHz); 12dB RL	15	20 Max.
Frequency Drift (MHz/°C)	---	-0.3 Max.
Power	Vdc	+5
	mA	22
		30 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 -110 dBc/Hz.

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

