

Voltage Controlled Oscillator

Low Noise Bipolar Transistor

Model TOM9338

180 to 220 MHz

Features

- Low Noise Bipolar Transistor
- Broad Tuning Range
- Operating Case Temp. -40 °C to + 85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -40°C to +85 °C
Frequency	180 - 220 MHz	180 - 220 MHz
Output Power (dBm)	+17.5	+15.0 Min.
Power Flatness (dBm)	±0.25	±0.5 Max.
Tuning Voltage Range (V)	4.0 to 9.0	0.0 to 12.0
Tuning Voltage Sensitivity (MHz/V)	9.0	3.0 Min.
Harmonics (dBc)	20.0	10.0 Max.
3dB Modulation BW, Zg = 50 Ohms	-----	5 MHz Min.
Pushing (MHz/V)	0.5	2.0 Max.
Pulling (MHz); 14 dB RL	5.0	10.0 Max.
Frequency Drift (MHz/°C)	-----	.10 Max.
Power Vdc	+15	+15
mA	26.0	30.0 Max.

Maximum Ratings

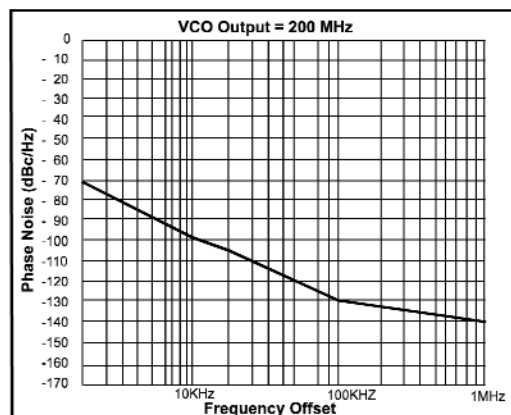
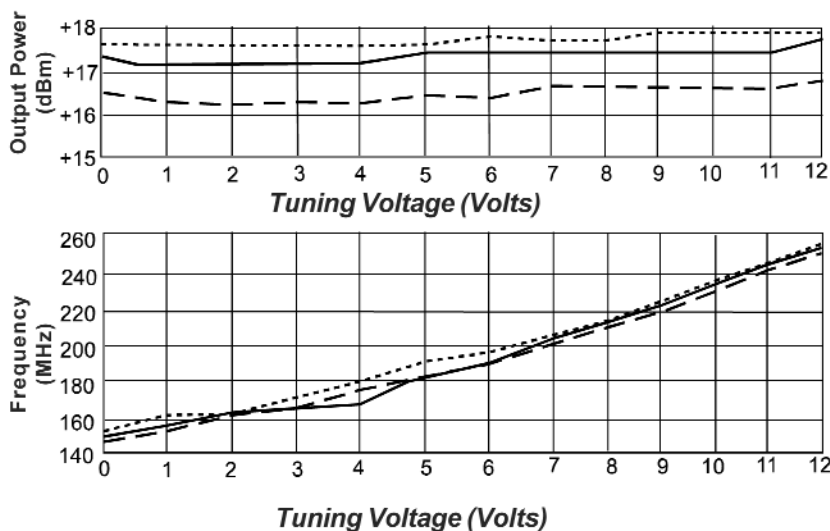
Ambient Operating Temperature -40°C to + 85 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Maximum DC Tuning Voltage + 15 Volts
 Minimum DC Tuning Voltage 0 Volts

Packaging Options (see Appendix)

TOM9338, 4 Pin TO-8 (T4)
 TON9338, 4 Pin Surface Mount (SM3)
 BXO9338, Connectorized Housing (H1)

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 -120dBc/Hz

Legend ——— + 25 °C - - - - +50 °C - - - - - 0 °C