

Voltage Controlled Oscillator

Low Noise Bipolar Transistor

Model TOM9335

750 to 940 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	750 - 940 MHz	750 - 940 MHz
Output Power (dBm)	+3.0	+2.0 Min.
Power Flatness(dBm)	±1.0	±1.5 Max.
Tuning Voltage Range (v)	0.0 to 5.0	0.0 to 5.0
Tuning Voltage Sensitivity (MHz/V)	40.0	30 to 55 Min.
Harmonics (dBc)	-11	-10 Max.
Spurious (dBc)	<- 60	<- 60 Max.
Phase Noise @ 100 KHz (dBc/hz)	-102	-100 Max.
Pushing (MHz/V)	3.0	6.0 Max.
Pulling (MHz); 12 dB RL	25.0	35.0 Max.
Frequency Drift (MHz/ °C)	---	±0.25 Max.
Power	Vdc	+5
	mA	8.0 10.0 Max.

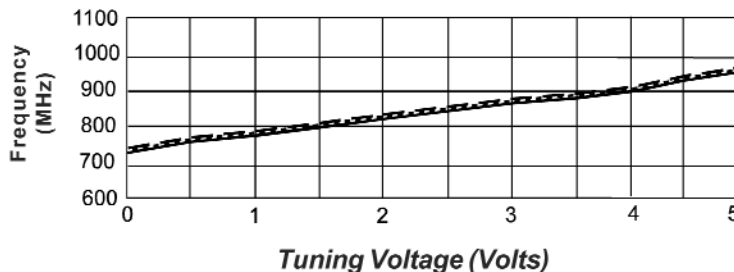
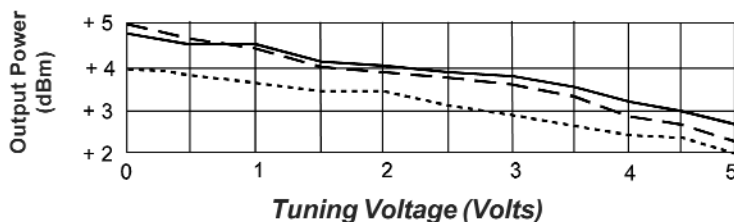
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 10 Volts
 Maximum DC Tuning Voltage + 20 Volts
 Minimum DC Tuning Voltage 0 Volts

Packaging Options (see Appendix)

TOM9335, 4 Pin TO-8 (T4)
 TON9335, 4 Pin Surface Mount (SM3)
 BXO9335, Connectorized Housing (H1)

Note: Care should always be taken to effectively ground the case of each unit.



Legend ——— + 25 °C - - - - +85 °C-40 °C

V _t (V)	f _o (MHz)	Δ f (MHz)	P _o (dBm)	2H (dBc)	3H (dBc)
0.00	737.3		+4.90	-11.8	-29.6
0.50	762.1	49.8	+4.55	-12.1	-30.0
1.00	782.6	41.0	+4.42	-12.4	-31.0
1.50	802.1	39.0	+4.11	-12.6	-31.2
2.00	821.1	38.0	+4.10	-13.0	-31.1
2.50	840.5	38.8	+3.93	-13.1	-30.2
3.00	861.1	41.2	+3.72	-13.5	-29.8
3.50	882.0	41.8	+3.48	-13.7	-29.2
4.00	903.6	43.2	+3.24	-14.1	-28.5
4.50	926.3	45.3	+3.00	-14.3	-28.9
5.00	949.8	47.0	+2.82	-14.7	-31.3

VCOS

