

VOLTAGE CONTROLLED OSCILLATOR

TOM9323 200-250 MHz

Available as:

TOM9323, 4 Pin TO-8 (T4)
TON9323, 4 Pin Surface Mount (SM3)
BXO9323, Connectorized Housing (H1)

Features

- Center Frequency: 225 MHz @ 8 Tuning Volts Typical
- Low Noise Bipolar Transistor
- Operating Case Temp. 0 °C to + 70 °C
- Screening to the tables of MIL-STD-883 available

Specifications

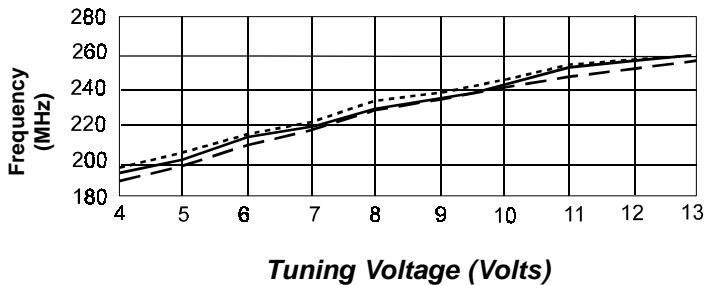
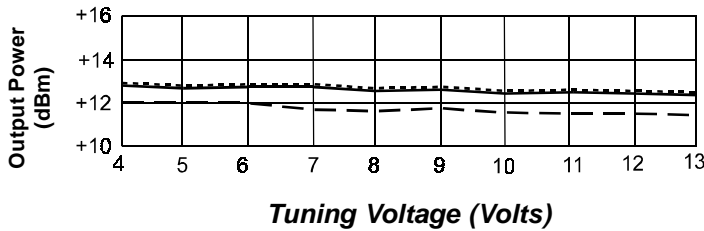
CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = 0°C to +70 °C
Frequency	200 - 250 MHz	200 - 250 MHz
Output Power (dBm)	+13.0	+10.0 Min.
Power Flatness (dBm)	±0.2	±0.5 Max.
Tuning Voltage Range (V)	4 to 13	4 to 13
Tuning Voltage Sensitivity (MHz/V)	7.0	4.0 Min.
Harmonics (dBc)	-15	-10 Max.
Spurious (dBc)	<-80	-60 Max.
Phase Noise @ 100 KHz (dBc/Hz)	-120	-110 Max.
Pushing (MHz/V)	0.5	2.0 Max.
Pulling (MHz); 12 dB RL	5.0	10.0 Max.
Frequency Drift (MHz/°C)	0.05	0.10 Max.
Power Vdc	+10	+10
mA	14.0	16.0 Max.

Maximum Ratings

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

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

Typical Performance Data



V _t (V)	f _o (MHz)	Δf (MHz)	P _o (dBm)	2H (dBc)	3H (dBc)
4.0	193.9		+12.8	-15	-16
5.0	202.9	9.0	+12.7	-15	-16
6.0	211.1	8.2	+12.6	-15	-16
7.0	218.6	7.5	+12.6	-15	-17
8.0	225.7	7.1	+12.6	-15	-17
9.0	232.8	7.1	+12.6	-15	-17
10.0	239.3	6.5	+12.3	-16	-18
11.0	245.4	6.1	+12.4	-15	-19
12.0	251.2	5.8	+12.4	-15	-19
13.0	256.4	5.2	+12.4	-15	-19

Legend ——— +25 °C - - - - +70 °C ······ 0 °C

AMPLIFONIX

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