

VOLTAGE CONTROLLED OSCILLATOR

TOM9321
400 - 500 MHz

Available as:

- TOM9321, 4 Pin TO-8 (T4)
- TON9321, 4 Pin Surface Mount (SM3)
- BXO9321, Connectorized Housing (H1)

Features

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

Specifications

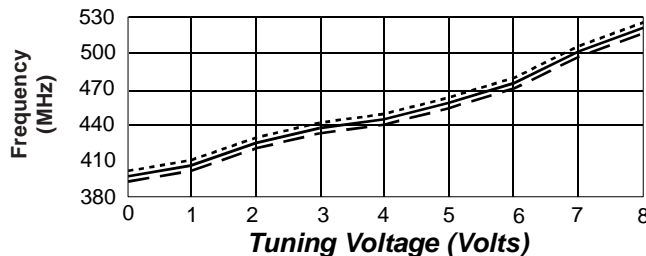
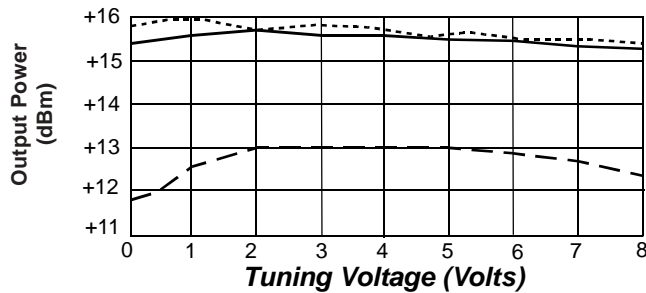
CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -40°C to +85 °C
Frequency	400 - 500 MHz	400 - 500 MHz
Output Power (dBm)	+15.0	+11.0 Min.
Power Flatness (dBm)	±0.5	±1.0 Max.
Tuning Voltage Range (V)	0 to 8	0 to 8
Tuning Voltage		
Sensitivity (MHz/V)	10 to 25	9 to 25
Harmonics (dBc)	-20	-11 Max.
Spurious (dBc)	<-60	-60 Max.
Phase Noise @ 100 KHz (dBc/Hz)	-110	-107 Max.
Pushing (MHz/V)	0.5	1.0 Max.
Pulling (MHz); 12 dB RL	3	6 Max.
Frequency Drift (MHz/°C)	---	-0.15 Max.
Power		
Vdc	+15	+15
mA	25.0	30.0 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



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

V (V)	f _o (MHz)	Δf (MHz)	P _o (dBm)	2H (dBc)	3H (dBc)
0.00	394.0		+15.39	-24.45	-21.52
1.00	409.6	15.6	+15.65	-25.12	-22.44
2.00	420.8	11.3	+15.71	-24.88	-21.73
3.00	431.6	10.8	+15.60	-24.50	-20.94
4.00	443.4	11.8	+15.59	-24.36	-21.13
5.00	458.3	14.9	+15.49	-24.32	-21.83
6.00	477.6	19.3	+15.53	-24.82	-22.59
7.00	500.2	22.6	+15.35	-25.21	-23.19
8.00	523.0	22.8	+15.23	-26.28	-25.06

