

VOLTAGE CONTROLLED OSCILLATOR

TOM9090

900-1600 MHz

Available as:

TOMB201, 4 Pin TO-8 (T4)
TONB201, 4 Pin Surface Mount (SM3)
TOPB201, 4 Pin Flatpack (FP4)
BXOB201, Connectorized Housing (H1)

Features

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

Specifications

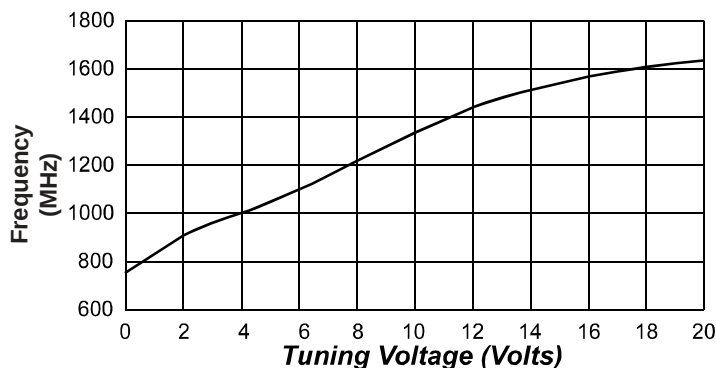
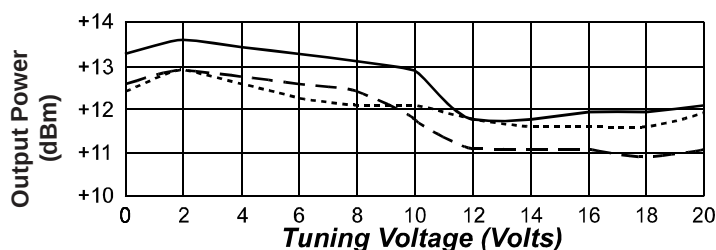
CHARACTERISTIC	TYPICAL Ta = 25 °C	MIN/MAX -55 °C to +85 °C
Frequency	900 - 1600 MHz	900 - 1600 MHz
Output Power (dBm)	+12.5	+10.0 Min.
Power Flatness (dB)	+/- 0.5	+/- 2.0 Max.
Tuning Voltage Range (v)	2 to 18	0 to 20
Tuning Voltage Sensitivity (MHz/V)	20	15 Min.
Harmonics (dBc)	-17	-10 Max.
Spurious (dBc)	<-80	-60 Max.
3dB Modulation BW, Zg = 50 Ohms	—	10 MHz Min.
Pushing (MHz/V)	2.0	6.0 Max.
Pulling (MHz); 12 dB RL	25	30 Max.
Frequency Drift (MHz/°C)	—	0.3 Max.
Power Vdc	+15	+15
mA	16	25.0 Max.

Maximum Ratings

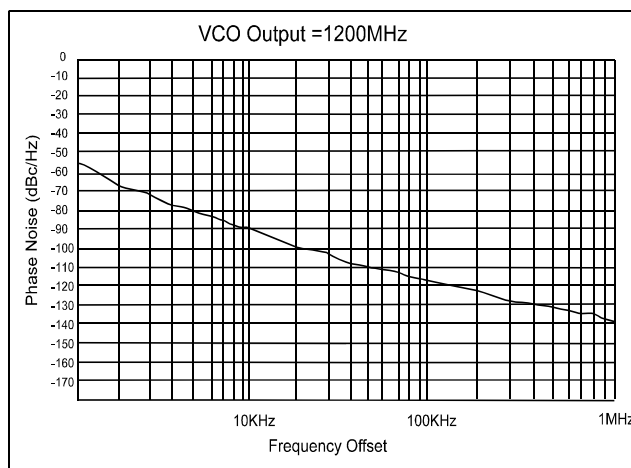
Ambient Operating Temperature -55°C to + 100 °C
Storage Temperature -62°C to + 125 °C
Case Temperature + 125 °C
DC Voltage + 20 Volts
Maximum DC Tuning Voltage + 20 Volts
Minimum DC Tuning Voltage 0 Volts

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

Typical Performance Data



Legend ----- + 25 °C ----- +85 °C - - - - -55 °C



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.



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 12/17/04

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001