

VOLTAGE CONTROLLED OSCILLATOR

TOM9009

100-150 MHz

Available as:
TOM9009, 4 Pin TO-8 (T4)
TON9009, 4 Pin Surface Mount (SM3)
BXO9009, Connectorized Housing (H1)

Features

- Low Noise Bipolar Transistor
- Broad Tuning Range
- Operating Case Temp. -20 °C to +60 °C
- Environmental Screening Available

Specifications

| CHARACTERISTIC | TYPICAL Ta = +25 °C | MIN/MAX Ta = -20°C to +60 °C |
|------------------------------------|------------------------|---------------------------------|
| Frequency | 100 - 150 MHz | 100 - 150 MHz |
| Output Power (dBm) | +10.0 | +7.0 Min. |
| Power Flatness (dBm) | ±0.2 | ±1.0 Max. |
| Tuning Voltage Range (V) | 2 to 8 | 1 to 15 |
| Tuning Voltage Sensitivity (MHz/V) | 7.0 | 4.0 |
| Harmonics (dBc) | -12 | -8 Max. |
| Spurious (dBc) | < -80 | -80 Max. |
| Phase Noise @ 100 KHz (dBc/Hz) | -125 | -120 Max. |
| Pushing (MHz/V) | 0.2 | 1.0 Max. |
| Pulling (MHz); 12 dB RL | 3.0 | 6.0 Max. |
| Frequency Drift (MHz/°C) | -0.02 | -0.05 Max. |
| Power Vdc | +10 | +10 |
| mA | 9.5 | 10.0 Max. |

Maximum Ratings

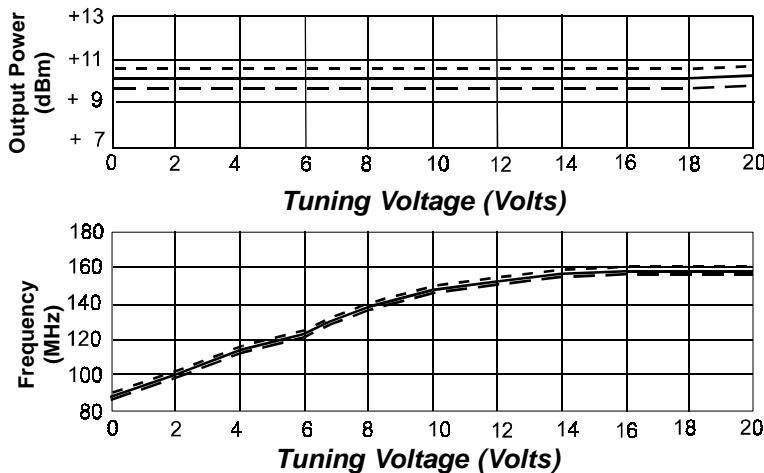
Ambient Operating Temperature -55°C to + 100 °C
Storage Temperature -62°C to + 125 °C
Case Temperature + 125 °C
DC Voltage + 20 Volts
Maximum DC Tuning Voltage + 20 Volts
Minimum DC Tuning Voltage 0 Volt

| V _t (V) | f _o (MHz) | Δf (MHz) | P _o (dBm) | 2H (dBc) | 3H (dBc) |
|-----------------------|-------------------------|-------------|-------------------------|-------------|-------------|
| 0.00 | 88.2 | | +10.29 | -13.31 | -11.87 |
| 1.00 | 94.6 | 6.4 | +10.24 | -13.36 | -11.64 |
| 2.00 | 99.4 | 4.8 | +10.24 | -13.30 | -11.58 |
| 3.00 | 104.0 | 4.6 | +10.23 | -13.34 | -11.63 |
| 4.00 | 109.3 | 5.3 | +10.23 | -12.91 | -11.66 |
| 5.00 | 115.5 | 6.2 | +10.22 | -12.70 | -11.97 |
| 6.00 | 122.5 | 7.0 | +10.20 | -12.77 | -11.98 |
| 7.00 | 129.6 | 7.1 | +10.18 | -13.00 | -12.12 |
| 8.00 | 135.7 | 6.1 | +10.16 | -13.60 | -12.32 |
| 9.00 | 140.9 | 5.2 | +10.14 | -13.96 | -12.35 |
| 10.00 | 145.1 | 4.2 | +10.12 | -14.19 | -12.47 |
| 11.00 | 148.2 | 3.1 | +10.11 | -14.41 | -12.69 |
| 12.00 | 150.7 | 2.5 | +10.10 | -14.69 | -12.83 |
| 13.00 | 152.5 | 1.8 | +10.09 | -14.89 | -12.77 |
| 14.00 | 153.7 | 1.2 | +10.09 | -14.93 | -12.76 |
| 15.00 | 154.5 | 0.8 | +10.08 | -15.11 | -12.70 |

www.DataSheet4U.com

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

Typical Performance Data



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



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 •••• FAX 215-464-4000 DataSheet4U.com