

VOLTAGE CONTROLLED OSCILLATOR

TOM9329

1875 - 1975 MHz

Available as:

TOM9329, 4 Pin TO-8 (T4)
TON9329, 4 Pin Surface Mount (SM3)
BXO9329, Connectorized Housing (H1)

Features

- Low Noise Bipolar Transistor
- Linear Tuning
- Operating Case Temp. -30 °C to +55 °C
- Environmental Screening Available

Specifications

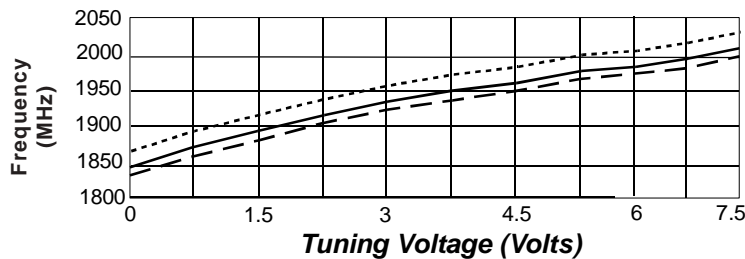
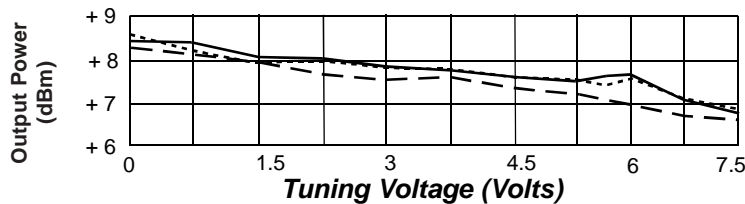
| CHARACTERISTIC | TYPICAL Ta = +25 °C | MIN/MAX Ta = -30°C to +55 °C |
|--------------------------|------------------------|---------------------------------|
| Frequency | 1875 - 1975 MHz | 1875 - 1975 MHz |
| Output Power (dBm) | +7.0 | +5.0 Min. |
| Power Flatness (dBm) | ±0.5 | ±0.75 Max. |
| Tuning Voltage Range (V) | 0.5 to 5.5 | 0.0 to 7.5 |
| Tuning Voltage | | |
| Sensitivity (MHz/V) | 25.0 | 15.0 Min. |
| Harmonics (dBc) | -30 | -20 Max. |
| Spurious (dBc) | <-80 | <-80 Max. |
| Phase Noise | | |
| @ 100 KHz (dBc/Hz) | -105 | -100 Max. |
| Pushing (MHz/V) | 6.0 | 9.0 Max. |
| Pulling (MHz); 12 dB RL | 40.0 | 55.0 Max. |
| Frequency Drift (MHz/°C) | -0.35 | -0.50 Max. |
| Power | | |
| Vdc | +5 | +5 |
| mA | 24.0 | 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 + 10 Volts
Maximum DC Tuning Voltage + 15 Volts
Minimum DC Tuning Voltage 0 Volts

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) |
|-----------------------|-------------------------|-------------|-------------------------|-------------|-------------|
| 0.00 | 1851.9 | | +8.49 | -28.96 | -33.91 |
| 0.50 | 1868.4 | 33.0 | +8.45 | -29.45 | -33.52 |
| 1.00 | 1883.0 | 29.2 | +8.31 | -30.63 | -34.13 |
| 1.50 | 1895.6 | 25.3 | +8.12 | -32.05 | -34.59 |
| 2.00 | 1907.3 | 23.2 | +8.08 | -32.79 | -33.97 |
| 2.50 | 1918.6 | 22.8 | +7.95 | -33.32 | -34.35 |
| 3.00 | 1929.0 | 20.7 | +7.82 | -34.06 | -35.94 |
| 3.50 | 1939.0 | 20.0 | +7.82 | -34.93 | -37.88 |
| 4.00 | 1948.6 | 19.3 | +7.64 | -36.10 | -38.50 |
| 4.50 | 1958.1 | 19.0 | +7.55 | -37.23 | -37.58 |
| 5.00 | 1967.6 | 19.0 | +7.47 | -38.03 | -38.80 |
| 5.50 | 1976.6 | 18.0 | +7.46 | -38.65 | -39.44 |
| 6.00 | 1985.8 | 18.2 | +7.32 | -39.38 | -38.47 |
| 6.50 | 1995.3 | 19.0 | +7.15 | -39.36 | -38.83 |
| 7.00 | 2004.3 | 18.0 | +7.02 | -40.15 | -38.87 |
| 7.50 | 2013.8 | 19.0 | +6.93 | -40.70 | -38.52 |

Legend ——— +25 °C - - - - - +55 °C - - - - - -30 °C



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