

VOLTAGE CONTROLLED OSCILLATOR

TOM9335

750 - 940 MHz

Available as:
TOM9335, 4 Pin TO-8 (T4)
TON9335, 4 Pin Surface Mount (SM3)
BXO9335, Connectorized Housing (H1)

Features

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

Specifications

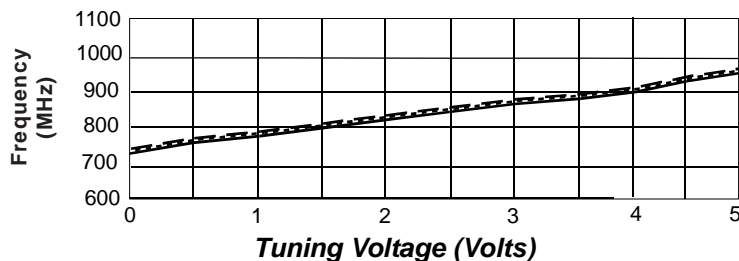
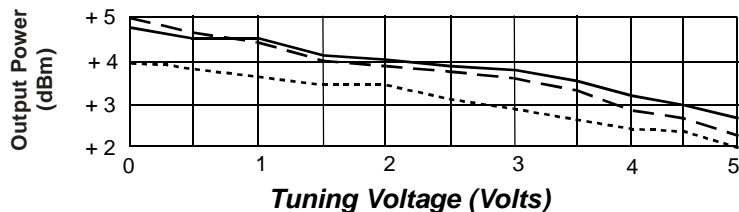
| CHARACTERISTIC | TYPICAL Ta = +25 °C | MIN/MAX Ta = -40°C to +85 °C |
|------------------------------------|------------------------|---------------------------------|
| Frequency | 750 - 940 MHz | 750 - 940 MHz |
| Output Power (dBm) | +3.0 | +2.0 Min. |
| Power Flatness(dBm) | +/-1.0 | +/-1.5 Max. |
| Tuning Voltage Range (v) | 0.0 to 5.0 | 0.0 to 5.0 |
| Tuning Voltage Sensitivity (MHz/V) | 40.0 | 30 to 55 Min. |
| Harmonics (dBc) | -11 | -10 Max. |
| Spurious (dBc) | <-60 | <-60 Max. |
| Phase Noise @ 100 KHz (dBc/hz) | -102 | -100 Max. |
| Pushing (MHz/V) | 3.0 | 6.0 Max. |
| Pulling (MHz); 12 dB RL | 25.0 | 35.0 Max. |
| Frequency Drift (MHz/ °C) | ---- | +/-0.25 Max. |
| Power Vdc | +5 | +5 |
| mA | 8.0 | 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 + 10 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



| V _t (V) | f _o (MHz) | Δf (MHz) | P _o (dBm) | 2H (dBc) | 3H (dBc) |
|--------------------|----------------------|----------|----------------------|----------|----------|
| 0.00 | 737.3 | | +4.90 | -11.8 | -29.6 |
| 0.50 | 762.1 | 49.8 | +4.55 | -12.1 | -30.0 |
| 1.00 | 782.6 | 41.0 | +4.42 | -12.4 | -31.0 |
| 1.50 | 802.1 | 39.0 | +4.11 | -12.6 | -31.2 |
| 2.00 | 821.1 | 38.0 | +4.10 | -13.0 | -31.1 |
| 2.50 | 840.5 | 38.8 | +3.93 | -13.1 | -30.2 |
| 3.00 | 861.1 | 41.2 | +3.72 | -13.5 | -29.8 |
| 3.50 | 882.0 | 41.8 | +3.48 | -13.7 | -29.2 |
| 4.00 | 903.6 | 43.2 | +3.24 | -14.1 | -28.5 |
| 4.50 | 926.3 | 45.3 | +3.00 | -14.3 | -28.9 |
| 5.00 | 949.8 | 47.0 | +2.82 | -14.7 | -31.3 |

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



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