## **Voltage Controlled Oscillator**

## **Microwave Band**

## Model HV83T-Model HV83SM-1

3.5 to 4.5 GHz

## **Electrical Specifications** <sup>(1)</sup>:

| Parameter                                      | Specifications      |
|--|---------------------|
| Frequency Range                                | 3.5 to 4.5 GHz      |
| Power Output at 25°C (50 Ohm load)             | +10 dBm, min.       |
| Power Output Variation vs. Temperature         | 2.0 dB, typical     |
| Frequency Drift vs. Temperature <sup>(2)</sup> | 145 MHz, typical    |
| Frequency Pulling (12 dB Return Loss)          | 35 MHz, typical     |
| Frequency Pushing                              | 6.0 MHz/V, typical  |
| Tuning Voltage Limits                          | 0 to +20 VDC        |
| SSB Phase Noise (50 kHz offset)                | -93 dBc/Hz, typical |
| Harmonics <sup>(3)</sup>                       | -14 dBc, typical    |
| Spurious                                       | -70 dBc, max.       |
| Bias Voltage <sup>(4)</sup>                    | +15 VDC ±1%         |
| Bias Current <sup>(5)</sup>                    | 50 mA, typical      |
| Operating Temperature                          | -55 to +85 °C       |

Notes:

1. Specifications guaranteed over the operating temperature range. Those specifications indicated as typical are not

guaranteed. Plots exemplify typical performance at +25°C

2 Total frequency drift over the full temperature range. Worst case harmonics over the frequency range.

3.

Alternate bias voltages available.

5. Lower bias current available.

Other package available see page 4-39
Military screening available.













MODULATION SENSITIVITY (MHz/V)





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