Voltage Controlled Oscillator

Model HV83T-1
Model HV83SM-12

Microwave Band

3.5 to 4.5 GHz

Electrical Specifications:[1]

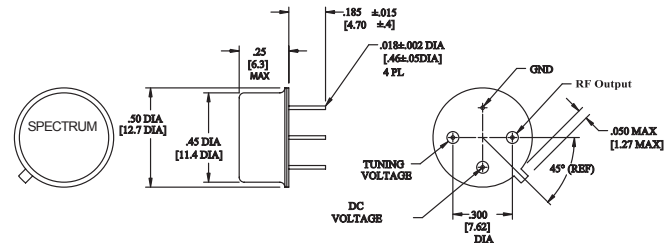
Parameter	Specifications
Frequency Range	3.5 to 4.5 GHz
Power Output at 25°C (50 Ohm load)	+10 dBm, min.
Power Output Variation vs. Temperature	2.0 dB, typical
Frequency Drift vs. Temperature[2]	145 MHz, typical
Frequency Pulling (12 dB Return Loss)	35 MHz, typical
Frequency Pushing	6.0 MHz/V, typical
Tuning Voltage Limits	0 to +20 VDC
SSB Phase Noise (50 kHz offset)	-93 dBc/Hz, typical
Harmonics[3]	-14 dBc, typical
Spurious	-70 dBc, max.
Bias Voltage[4]	+15 VDC ±1%
Bias Current[5]	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.
3. Worst case harmonics over the frequency range.
4. Alternate bias voltages available.
5. Lower bias current available.
6. Military screening available.

HV83T-1

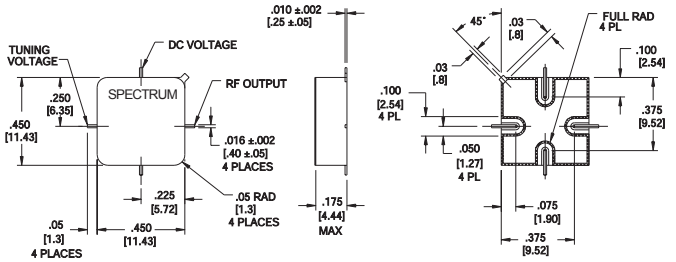
Outline: TO-8



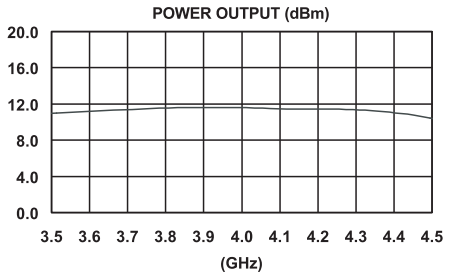
All dimensions are in inches and [mm].

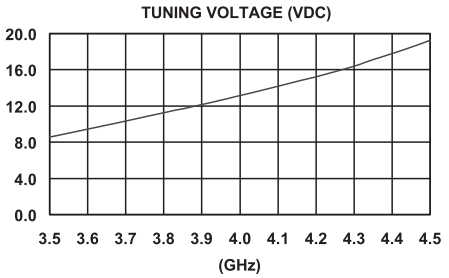
HV83SM-12

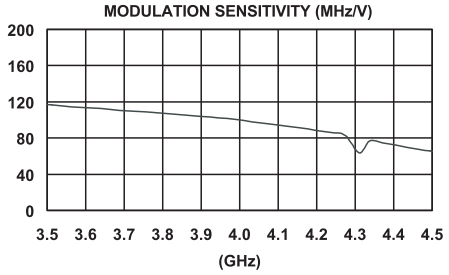
Outline: SMV2



Typical Performance at 25°C







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