Voltage Controlled Oscillator
Microwave Band

Model V111T-1
Model V111SM-12
9.0 to 10.0 GHz

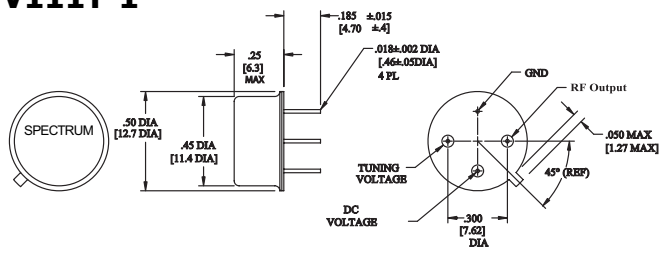
Electrical Specifications [1]:

Parameter	Specifications
Frequency Range	9.0 to 10.0 GHz
Power Output at 25°C (50 Ohm load)	+7.0 dBm, min.
Power Output Variation vs. Temperature	1.4 dB, typical
Frequency Drift vs. Temperature[2]	120 MHz, typical
Frequency Pulling (12 dB Return Loss)	45 MHz, typical
Frequency Pushing	22 MHz/V, typical
Tuning Voltage Limits	0 to +15 VDC
SSB Phase Noise (10 kHz offset)	-60 dB/Hz, typical
SSB Phase Noise (100 kHz offset)	-87 dB/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	-30 to +70 °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 voltage available.
5. Lower bias current available
6. Other package available see page 4-39
7. Military screening available.

V111T-1

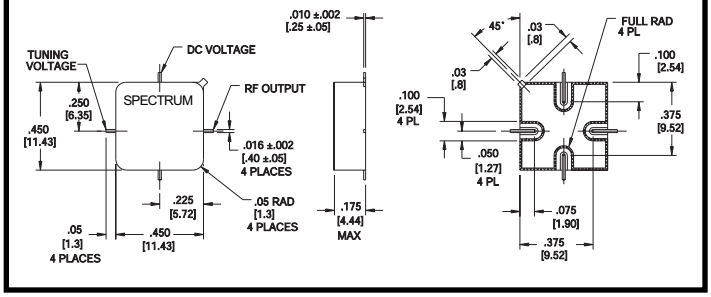
Outline: TO-8



All dimensions are in inches and [mm].

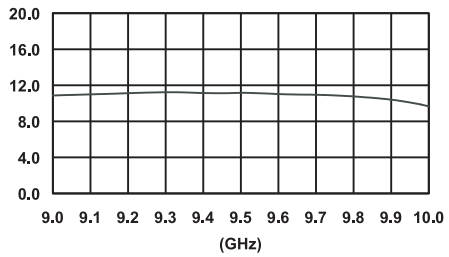
V111SM-12

Outline: SMV2

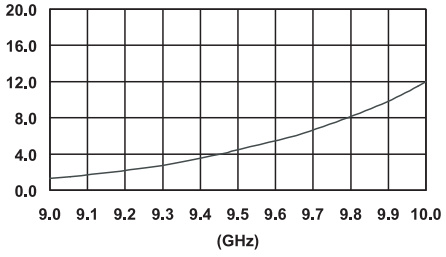


Typical Performance at 25°C

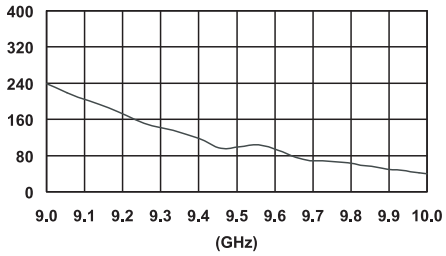
POWER OUTPUT (dBm)



TUNING VOLTAGE (VDC)



MODULATION SENSITIVITY (MHz/V)



VCOs

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