

# Voltage Controlled Oscillator

# Model HV93T-1 Model HV93SM-12

Microwave Band

4.7 to 6.0 GHz

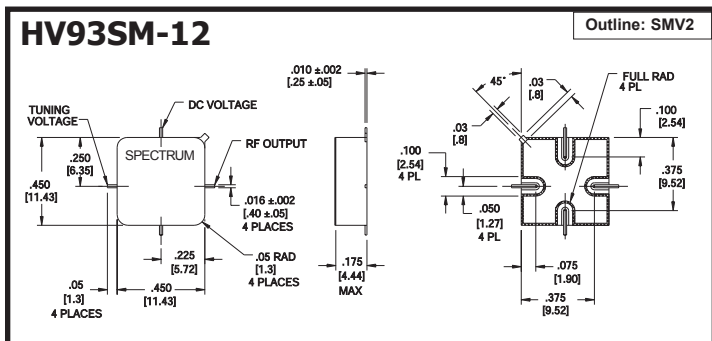
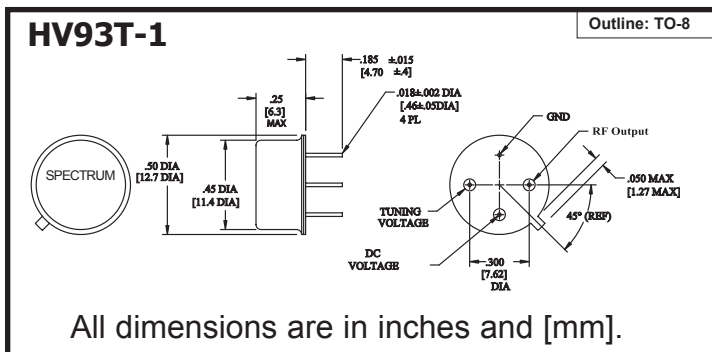
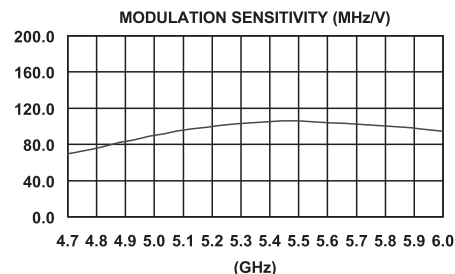
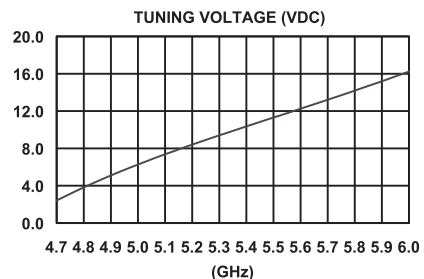
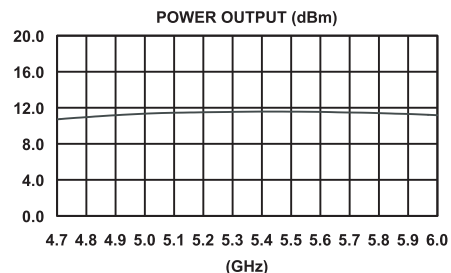
## Electrical Specifications: <sup>(1)</sup>

Parameter	Specifications
Frequency Range	4.7 to 6.0 GHz
Power Output at 25°C (50 Ohm load)	+7.0 dBm, min.
Power Output Variation vs. Temperature	2.0 dB, typical
Frequency Drift vs. Temperature <sup>(2)</sup>	75 MHz, typical
Frequency Pulling (12 dB Return Loss)	38 MHz, typical
Frequency Pushing	10 MHz/V, typical
Tuning Voltage Limits	0 to +20 VDC
SSB Phase Noise (50 kHz offset)	-90 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:

- Specifications guaranteed over the operating temperature range. Those specifications indicated as typical are not guaranteed. Plots exemplify typical performance at +25°C
- Total frequency drift over the full temperature range.
- Worst case harmonics over the frequency range.
- Alternate bias voltages available.
- Lower bias current available.
- Military screening available.

## Typical Performance at 25°C



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