

Voltage Controlled Oscillator

Model HV87T-4 Model HV87SM-42

Microwave Band

2.0 to 4.0 GHz

Electrical Specifications:⁽¹⁾

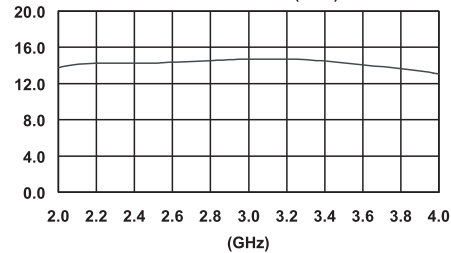
Parameter	Specifications
Frequency Range	2.0 to 4.0 GHz
Power Output at 25°C (50 Ohm load)	+10 dBm, min.
Power Output Variation vs. Temperature	2.0 dB, typical
Frequency Drift vs. Temperature ⁽²⁾	100 MHz, typical
Frequency Pulling (12 dB Return Loss)	35 MHz, typical
Frequency Pushing	10 MHz/V, typical
Tuning Voltage Limits	0 to +20 VDC
SSB Phase Noise (50 kHz offset)	-100 dBc/Hz, typical
Harmonics ⁽³⁾	-12 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:

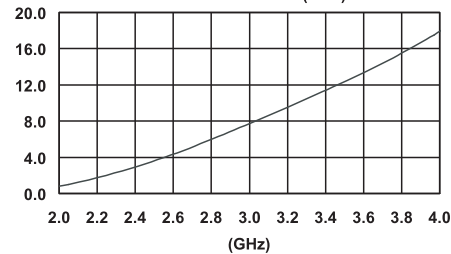
- Specifications guaranteed over the operating temperature range. Those specifications indicated as typical are not guaranteed. Plots exemplify typical performance at +25°C
- Total frequency drift over the full temperature range.
- Worst case harmonics over the frequency range.
- Alternate bias voltages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

Typical Performance at 25°C

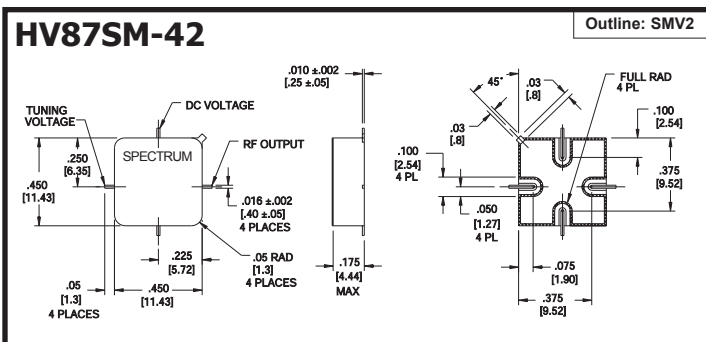
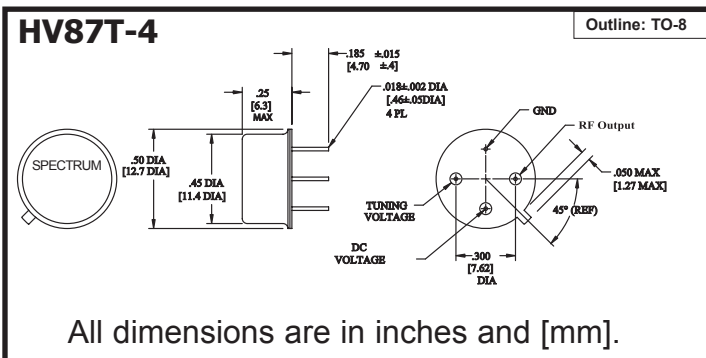
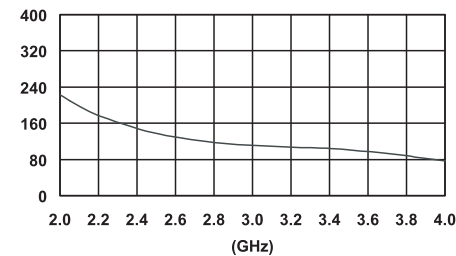
POWER OUTPUT (dBm)



TUNING VOLTAGE (VDC)



MODULATION SENSITIVITY (MHz/V)



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