



Features

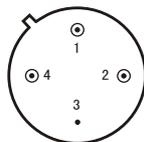
- Low phase noise
- Hyperabrupt varactor octave bandwidth
- Perfect tuning linearity 2:1
- Reliable thin film hybrid construction
- TO-8C、SMO-8C packages available
- Operating temperature range: -55°C ~ +85°C

Specifications($T_A=25^{\circ}C, V_{CC}=+12V$)

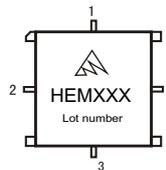
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	$f_L \sim f_H$	MHz	300~600	—	$V_T: 0 \sim 20V$
Power Output	P_o	dBm	≥ 13	15	$V_T=10V$
Power Output Variation	ΔP_o	dB	$\leq \pm 1.5$	± 1.0	$f_{L-H}: 300 \sim 600MHz$
Tuning Voltage	V_T	V	0~20	—	—
Pushing	K_{VC}	MHz/V	—	1.0	$V_{CC}=11 \sim 13V, V_T=10V$
Spurious	R_{fs}	dBc	≤ -70	—	$f_{L-H}: 300 \sim 600MHz$
Harmonics	R_{fn}	dBc	—	-10	$f_{L-H}: 300 \sim 600MHz$
SSB Phase Noise	S_{ϕ}	dBc/Hz	—	-110	$V_T=10V, f_m=10KHz$
Frequency Drift	Δf	MHz	—	16	$V_T=10V, T_A: -55 \sim +85^{\circ}C$
Current	I_{CC}	mA	—	30	—
Tuning Port Capacitance	C_T	pF	—	180	—

Absolute Ratings

- Maximum DC Voltage : +15V
- Maximum Tuning Voltage : +30V
- Minimum Tuning Voltage : -0.7V
- Maximum Storage Temp: +125°C



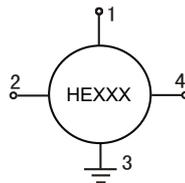
TO-8C



SMO-8C

Application Notes

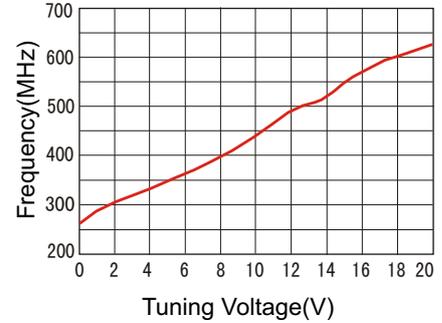
- 1.This device is only an oscillator;an external buffer amplifier or isolator is required to lower the frequency pulling
- 2.See assembly section for mounting information
- 3.ESD observe handing precautions
- 4.Equivalent to HV37T-7 of Magnum and MTO-8040 of HP



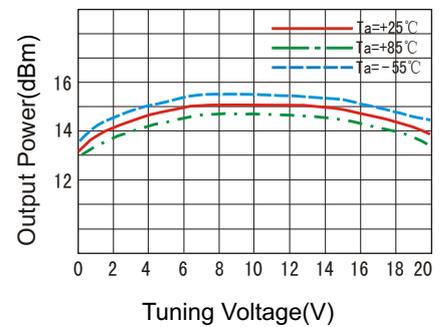
1. V_{CC} 3. GND
2. V_T 4. P_o

Typical Performance

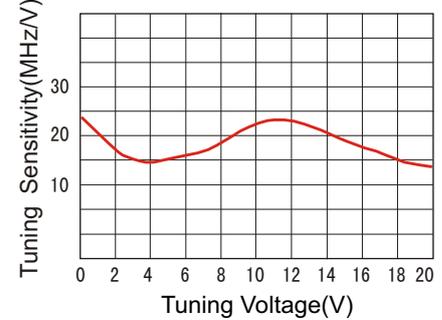
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

