

Features

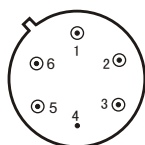
- Built-in buffer amplifier low frequency pulling
- Dual output flexible tuning design
- Perfect tuning linearity thin film hybrid construction
- TO-8E、SMO-8E、SP-1 package
- Operating temperature range: -55°C ~ +85°C

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

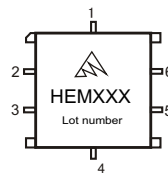
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Primary Frequency Range	$f_L \sim f_H$	MHz	800 ~ 1200	—	$V_{T1}: 0 \sim 15\text{V}$
Fine Frequency Range	—	MHz	—	15	$V_{T2}: 0 \sim 10\text{V}$
Main Output	P_{o1}	dBm	≥ 13	—	$V_{T1}=10\text{V}, V_{T2}=5\text{V}$
Aux Output	P_{o2}	dBm	—	0	—
Power Output Variation	ΔP_o	dB	$\leq \pm 1.5$	—	$f_{L-H}: 800 \sim 1200\text{MHz}$
Primary Tuning Voltage	V_{T1}	V	0 ~ 15	—	—
Fine Tuning Voltage	V_{T2}	V	0 ~ 10	—	—
Pushing	K_{VC}	MHz/V	—	2.0	$V_{CC}=+11 \sim 13\text{V}, V_{T1}=10\text{V}, V_{T2}=5\text{V}$
Spurious	R_{fs}	dBc	≤ -70	—	$f_{L-H}: 800 \sim 1200\text{MHz}$
Harmonics	R_{fn}	dBc	—	-15	$f_{L-H}: 800 \sim 1200\text{MHz}$
SSB Phase Noise	S_ϕ	dBc/Hz	—	-100	$V_{T1}=10\text{V}, V_{T2}=5\text{V}, f_m=10\text{KHz}$
Frequency Drift	Δf	MHz	—	20	$V_{T1}=10\text{V}, V_{T2}=5\text{V}, T_A: -55 \sim +55^\circ\text{C}$
Current	I_{CC}	mA	—	70	—
Tuning Port Capacitance	C_T	pF	—	90	—

Absolute Ratings

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



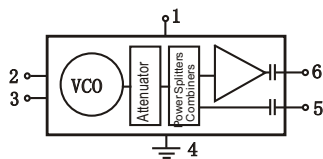
TO-8E



SMO-8E

Application Notes

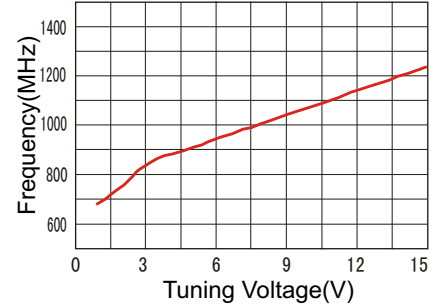
1. Pin 5 should be connected 50Ω load
2. See assembly section for mounting information
3. ESD observe handling precautions
4. Specified specification available within frequency range 25 ~ 5000MHz



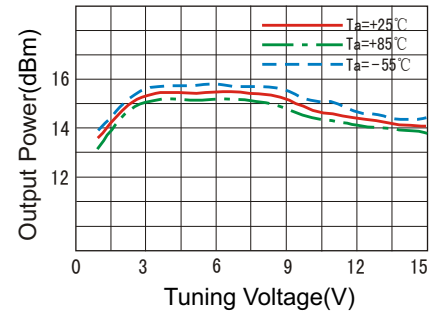
- 1. Vcc
- 2. VT2
- 3. VT1
- 4. GND
- 5. Po2
- 6. Po1

Typical Performance

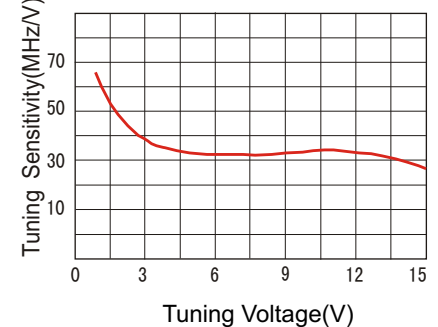
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

