HE486B/HEM486B
Broadband VCO

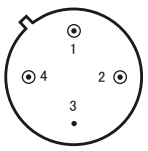


Features
- Low phase noise
- Hyperabrupt varactor broad tuning bandwith
- Perfect tuning linearity
- Reliable thin film hybrid construction
- TO-8C、SMO-8C、SP-1、SP-3 packages available
- Operating temperature range：-55℃～+85℃

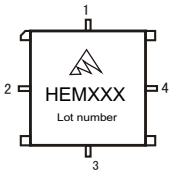
Specifications(T_A=25℃,V_{CC}=+12V)

Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	f_L～f_H	MHz	2000～3000	–	V_T:0～15V
Power Output	P_O	dBm	≥13	14	V_T=5V
Power Output Variation	△P_O	dB	≤±1.5	±1.0	f_{L-H}:2000～3000MHz
Tuning Voltage	V_T	V	0～15	–	–
Pushing	K_{VC}	MHz/V	–	3.0	V_{CC}=11～13V, V_T=5V
Spurious	R_{fs}	dBc	≤-70	–	f_{L-H}:2000～3000MHz
Harmonics	R_{fn}	dBc	–	-20	f_{L-H}:2000～3000MHz
SSB Phase Noise	S_Φ	dBc/Hz	–	-95	V_T=5V, f_m=10KHz
Frequency Drift	△f	MHz	–	50	V_T=5V, T_A:-55～+85℃
Current	I_{CC}	mA	–	30	–
Tuning Port Capacitance	C_T	pF	–	45	–

Absolute Ratings
Maximum DC Voltage : +15V
Maximum Tuning Voltage : +30V
Minimum Tuning Voltage : -0.7V
Maximum Storage Temp:+125℃

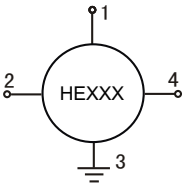


TO-8C



SMO-8C

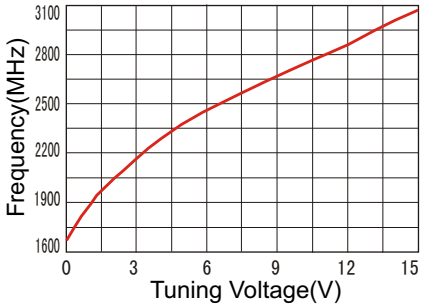
Application Notes
1. This device is only an oscillator;an external buffer amplifier or isolator is required to lower the frequency pulling
2. See assembly section for mounting information
3. ESD observe handing precautions
4. Equivalent to VCO-112 of VARIL and VTO-8200 of HP



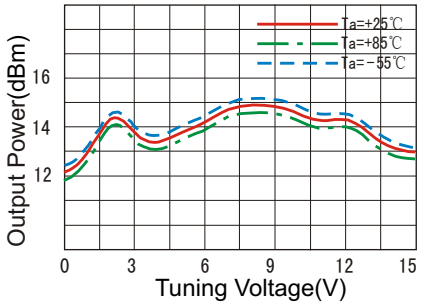
1. Vcc 3. GND
2. V_T 4. Po

Typical Performance

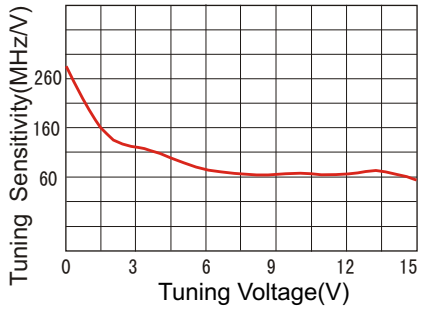
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

