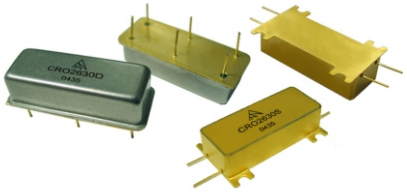
CRO2630D/CRO2630S

Low Phase Noise VCO With Ceramic Coaxial Resonator



Features

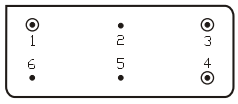
- Coaxial ceramic resonator
- Ultra low phase noise high stability
- Built-in buffer amplifier low frequency pulling
- Thin film hybrid construction small size
- Hermetic package (DIP-22C ; SP-22)
- Operating temperature range：-55℃～+85℃

Specifications(T_A=25℃,V_{CC}=+12V)

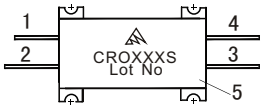
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	f_L～f_H	MHz	2600～2660	–	V_T:0～15V
Power Output	P_o	dBm	≥12	12.5	V_T=6V
Power Output Variation	△P_o	dB	≤±1.0	±0.5	f_{L-H}:2600～2660MHz
Tuning Voltage	V_T	V	0～15	–	–
Pushing	K_{VC}	MHz/V	–	0.1	V_{CC}=11～13V, V_T=6V
Spurious	R_{fs}	dBc	≤-75	–	f_{L-H}:2600～2660MHz
Harmonics	R_{fn}	dBc	–	-20	f_{L-H}:2600～2660MHz
SSB Phase Noise	S_Φ	dBc/Hz	–	-122	V_T=6V, f_m=10KHz
Frequency Drift	△f	MHz	–	2	V_T=6V, T_A:-55～+85℃
Current	I_{CC}	mA	–	65	–
Tuning Port Capacitance	C_T	pF	–	50	–

Absolute Ratings

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



DIP-22C



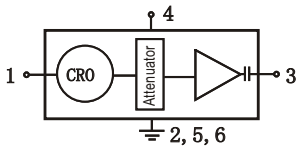
SP-22

Application Notes

1.See assembly section for mounting information

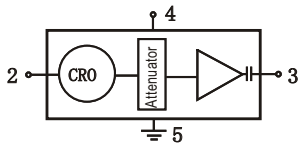
2.ESD observe handling precautions

3.DIP-22C is for CRO2630D; SP-22 is for CRO2630S.



DIP-22C

1.V_T 2,5,6.Case GND
3.P_O 4.V_{CC}

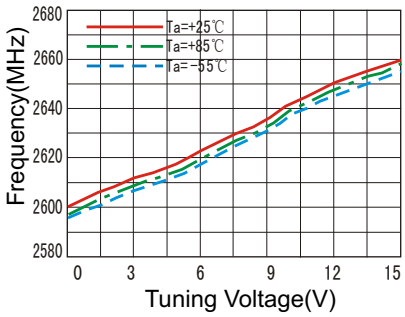


SP-22

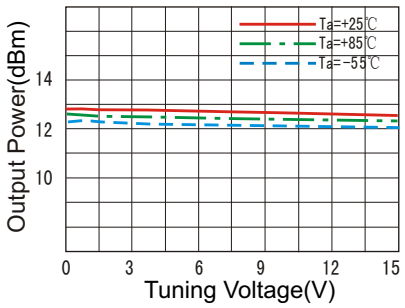
1.N/C 2.V_T 3.P_O
4.V_{CC} 5.Case GND

Typical Performance

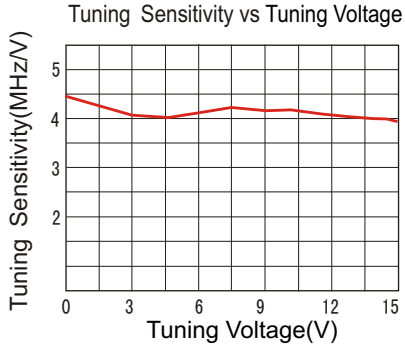
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency