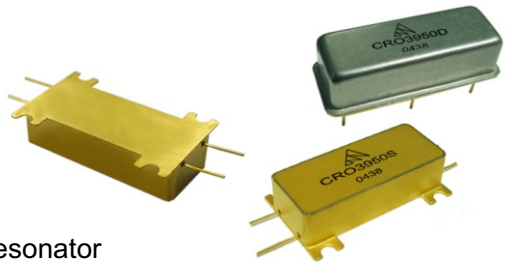
CRO3950D/CRO3950S

Low phase Noise VCO With Ceramic Coaxial Resonator



Features

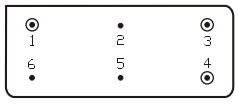
- Coaxial ceramic resonator
- Ultra low phase noise High stability
- Built-in buffer amplifier Low frequency pulling
- Thin film hybrid construction Small size
- Hermetic package (DIP-22C ; SP-22)
- Operating Temperature Range：-55℃～+85℃

Specifications(T_A=25℃,V_{CC}=+12V)

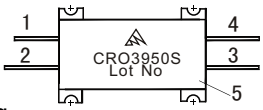
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	f_L～f_H	MHz	3920～3980	–	V_T:0～15V
Power Output	P_o	dBm	≥10	12.0	V_T=6V
Power Output Variation	△P_o	dB	≤±1. 0	±0.5	f_{L-H}:3920～3980MHz
Tuning Voltage	V_T	V	0～15	–	–
Pushing	K_{VC}	MHz/V	–	0. 3	V_{CC}=11～13V, V_T=6V
Spurious	R_{fs}	dBc	≤-75	–	f_{L-H}:3920～3980MHz
Harmonics	R_{fn}	dBc	–	-20	f_{L-H}:3920～3980MHz
SSB Phase Noise	S_Φ	dBc/Hz	–	-106	V_T=6V, f_m=10KHz
Frequency Drift	△f	MHz	–	7	V_T=6V, T_A:-55～+85℃
Current	I_{CC}	mA	–	70	–
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



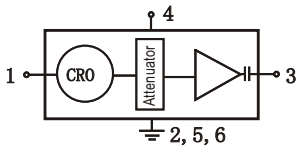
SP-22

Application Notes

1.See assembly section for mounting information

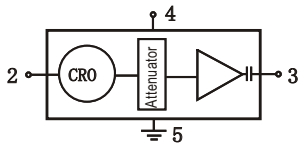
2.ESD observe handling precautions

3.DIP-22C is for CRO3950D；SP-22 is for CRO3950S.



DIP-22C

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

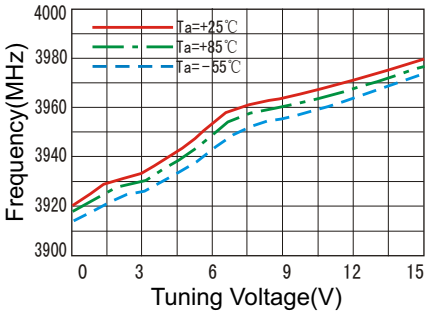


SP-22

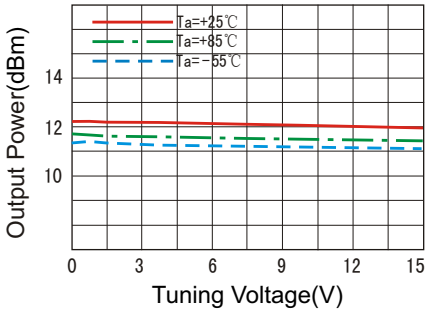
1.N/C 2.V_T 3.P_O
4.V_{CC} 5.Case GND

Typical Performance

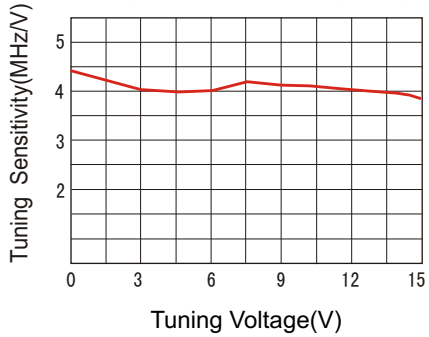
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

