



Features

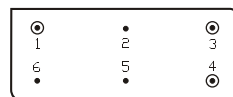
- Coaxial ceramic resonator
- Ultra low phase noise high stability
- Built-in buffer amplifier low frequency pulling
- Thin film hybrid construction small size
- Hermetic package (DIP-22C ; SP-22)
- Operating temperature range: $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$

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

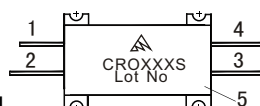
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	$f_L \sim f_H$	MHz	560~640	—	$V_T: 0 \sim 12\text{V}$
Power Output	P_o	dBm	≥ 13	13.5	$V_T=6\text{V}$
Power Output Variation	ΔP_o	dB	$\leq \pm 0.5$	± 0.3	$f_{L-H}: 560 \sim 640\text{MHz}$
Tuning Voltage	V_T	V	0~12	—	—
Pushing	K_{VC}	MHz/V	—	0.1	$V_{CC}=11 \sim 13\text{V}, V_T=6\text{V}$
Spurious	R_{fs}	dBc	≤ -75	—	$f_{L-H}: 560 \sim 640\text{MHz}$
Harmonics	R_{fn}	dBc	—	-15	$f_{L-H}: 560 \sim 640\text{MHz}$
SSB Phase Noise	S_{Φ}	dBc/Hz	—	-117	$V_T=6\text{V}, f_m=10\text{KHz}$
Frequency Drift	Δf	MHz	—	2	$V_T=6\text{V}, T_A: -55 \sim +85^{\circ}\text{C}$
Current	I_{CC}	mA	—	65	—
Tuning Port Capacitance	C_T	pF	—	100	—

Absolute Ratings

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



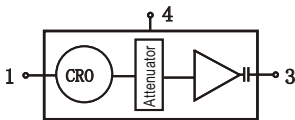
DIP-22C



SP-22

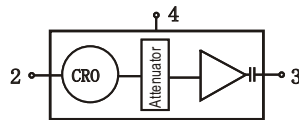
Application Notes

1. See assembly section for mounting information
2. ESD observe handling precautions
3. DIP-22C is for CRO600D; SP-22 is for CRO600S.



DIP-22C

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

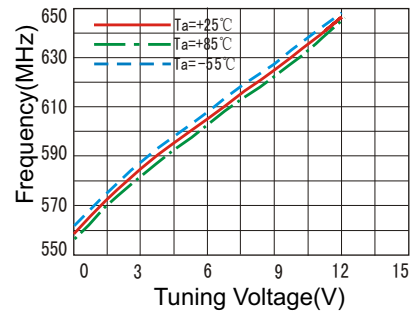


SP-22

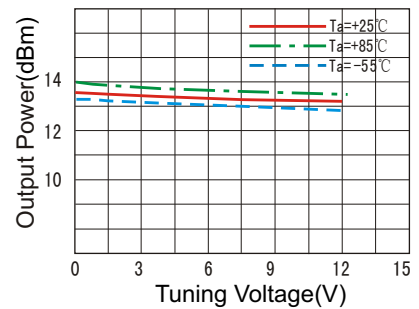
- 1. N/C
- 2. V_T
- 3. P_o
- 4. V_{CC}
- 5. Case GND

Typical Performance

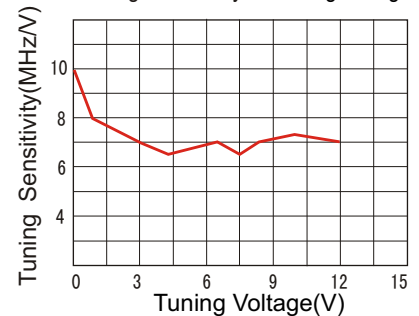
Frequency vs Tuning Voltage



Power Output vs Tuning Voltage



Tuning Sensitivity vs Tuning Voltage



Phase Noise vs Offset Frequency

