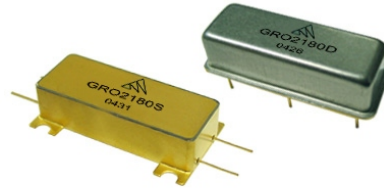


Features

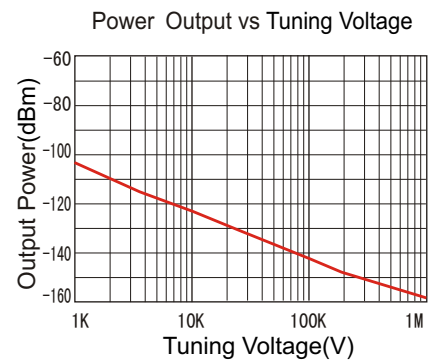
- Coaxial ceramic resonator
- Ultra low phase noise high stability
- Built-in buffer amplifier low frequency pulling
- Thin film hybrid construction small size
- Hermetic package (DIP-22C ; SP-22)
- Operating temperature range: $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$



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

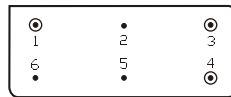
Parameter	Symbol	Unit	Guaranteed	Typical	Test Condition
Frequency Range	$f_L \sim f_H$	MHz	—	2180	—
Power Output	P_o	dBm	≥ 12	12.5	—
Power Output Variation	ΔP_o	dB	—	± 1.0	$T_A: -55 \sim +85^{\circ}\text{C}$
Pushing	K_{VC}	MHz/V	—	0.1	$V_{CC}=11 \sim 13\text{V}$
Spurious	R_{fs}	dBc	≤ -75	—	—
Harmonics	R_{fn}	dBc	—	-25	—
SSB Phase Noise	S_{ϕ}	dBc/Hz	—	-123	$F_m=10\text{KHz}$
Frequency Drift	Δf	MHz	—	1.5	$T_A: -55 \sim +85^{\circ}\text{C}$
Current	I_{CC}	mA	—	65	—

Typical Performance

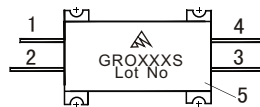


Absolute Ratings

Maximum DC Voltage : +15V
 Maximum Storage Temp: +125°C



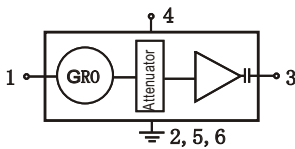
DIP-22C



SP-22

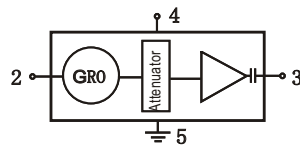
Application Notes

1. See assembly section for mounting information
2. ESD observe handling precautions
3. DIP-22C is for GRO2180D; SP-22 is for GRO2180S



DIP-22C

1.N/C 2,5,6.Case GND
 3.Po 4.Vcc



SP-22

1,2.N/C 3.Po
 4.Vcc 5.Case GND