

Voltage Controlled Oscillator

RSW230AM

Wideband 197 to 230 MHz

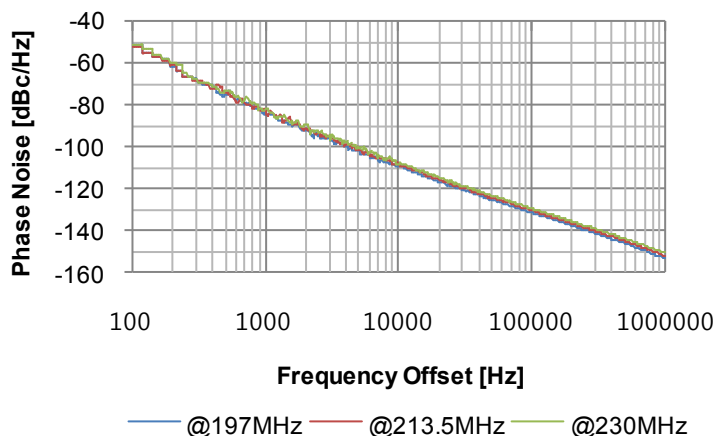
Rev. A

Features

- Low phase noise
- Linear tuning characteristics
- Low pushing / Low pulling
- Aqueous washable

Applications

- Broadcast
- VHF radio
- Wireless Telemetry
- Test Instrument-Signal Generation

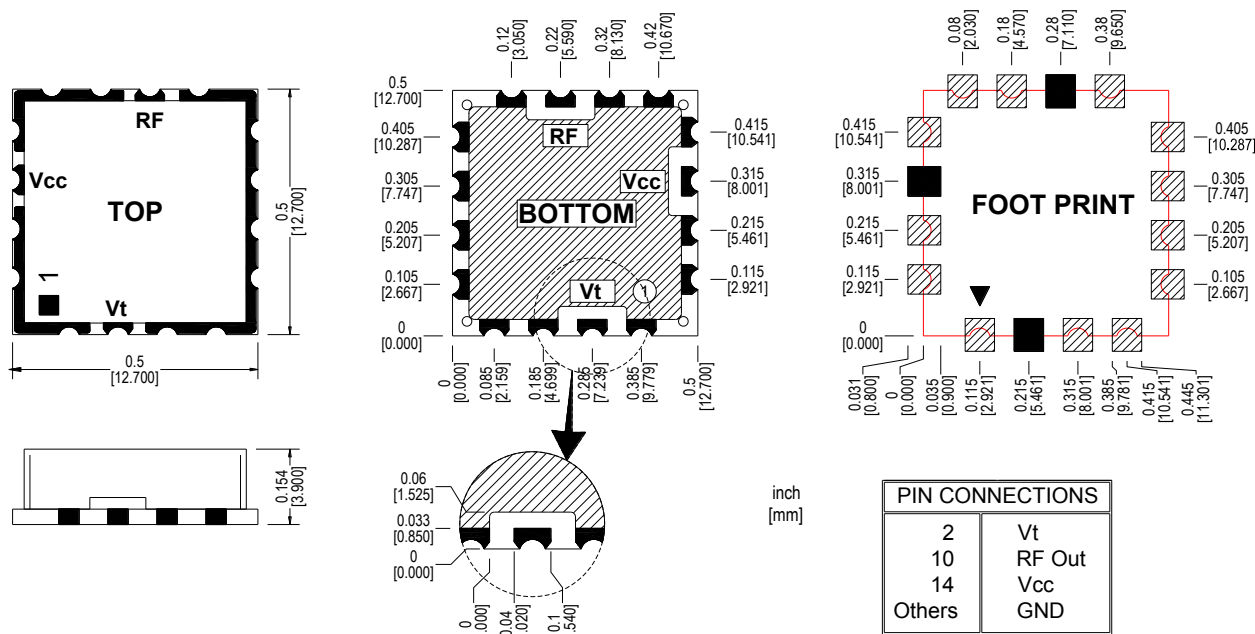


Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	197		230
Output Power	dBm	+8.0	+11.0	+14.0
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-109	-104
Phase Noise @100kHz offset	dBc/Hz		-128	-123
Tuning Voltage (Vt)	Vdc	0.5		5.5
Tuning Voltage Sensitivity (Kv)	MHz/V		13 - 20	
2nd Harmonic Suppression	dBc		-7	
Power Supply (Vcc) Voltage	Vdc		5	
Power Supply (Vcc) Current	mA		19	25
Pushing Figure	MHz/V		0.7	
Pulling Figure	MHz		0.33	
Input Capacitance	pF		100	
Operating Temp. Range	°C	-40		+85

Dimensions

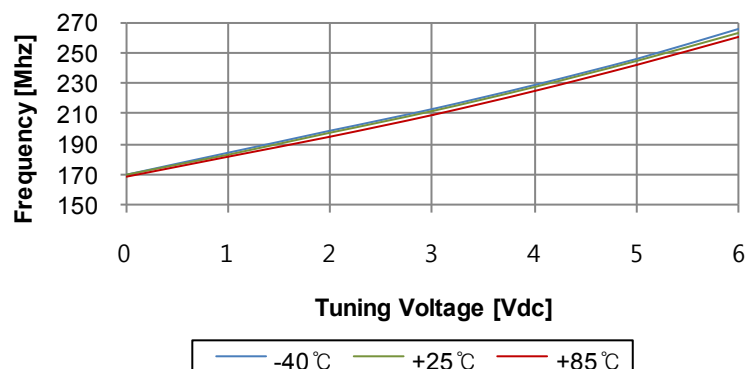


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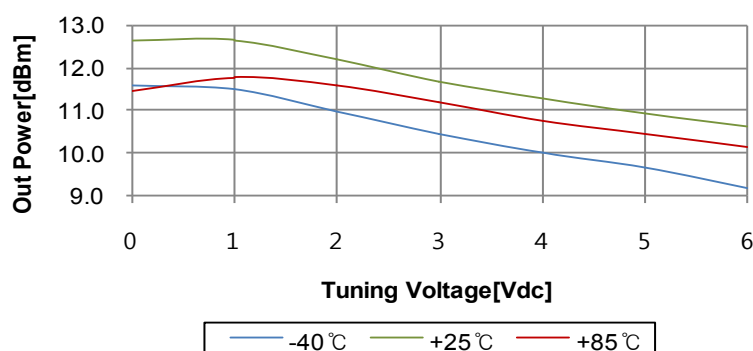
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Tuning Curve



Output Power Curve



Performance Data

Vt [Vdc]	Frequency [MHz]			Kv [MHz/V]			Output Power [dBm]			2nd Harmonic [dBc]
	+25°C	+85°C	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C	-40°C	
0.0	169.3	168.2	170.4	-	-	-	12.6	11.4	11.6	-4
1.0	183.6	181.6	184.7	14.2	13.4	14.3	12.7	11.8	11.5	-5
2.0	197.2	195.0	198.5	13.7	13.4	13.8	12.2	11.6	11.0	-6
3.0	211.8	209.3	213.4	14.6	14.3	14.8	11.7	11.2	10.5	-7
4.0	227.9	225.0	229.4	16.1	15.7	16.1	11.3	10.8	10.0	-8
5.0	245.4	242.2	247.0	17.5	17.2	17.5	10.9	10.5	9.7	-8
6.0	264.1	260.4	265.8	18.6	18.2	18.8	10.6	10.1	9.2	-8