

Voltage Controlled Oscillator

RSW200AM

Rev. A

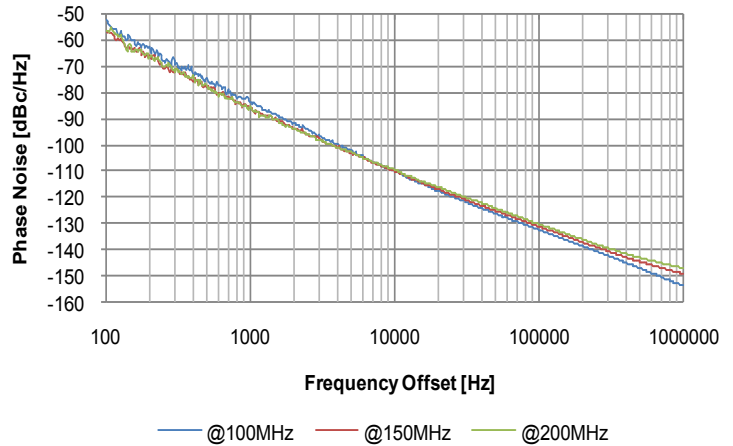
Wideband 100 to 200 MHz

Features

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

Applications

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

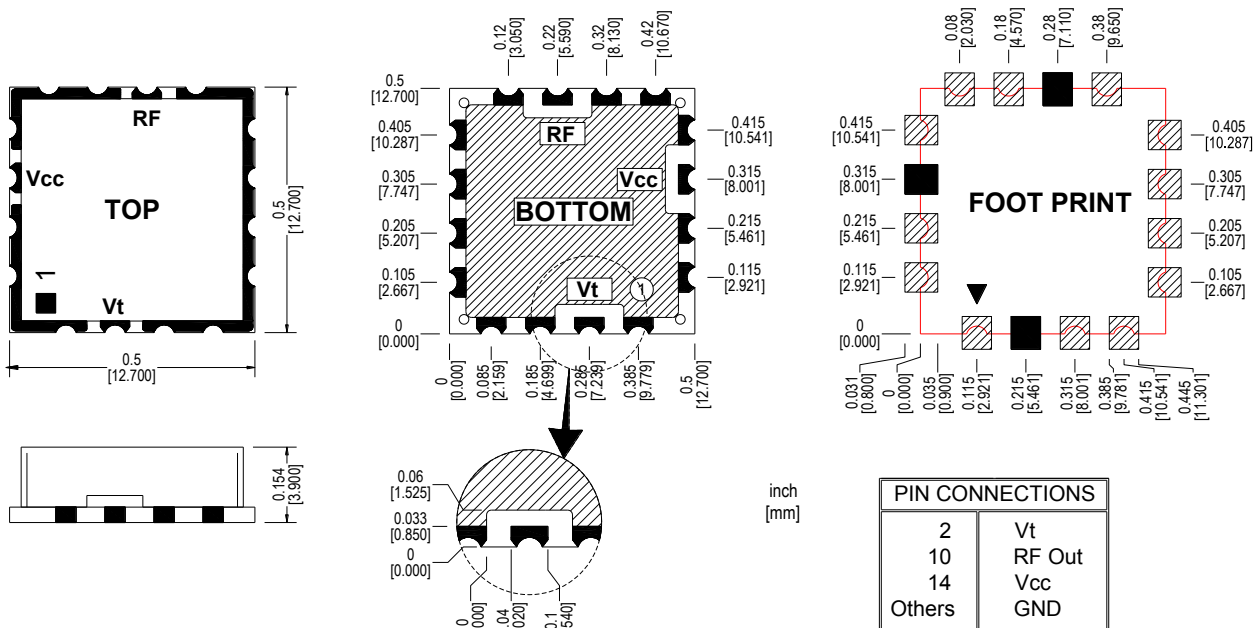


Electrical Characteristics

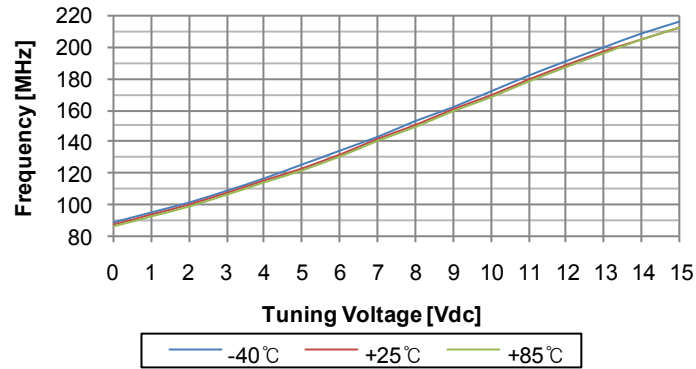


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	100		200
Output Power	dBm	5.0	9.0	13.0
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-110	-105
	@100kHz offset		-131	-126
Tuning Voltage (Vt)	Vdc	1.5		15.0
Tuning Voltage Sensitivity (Kv)	MHz/V		7 - 10	
2nd Harmonic Suppression	dBc		-12	
Power Supply (Vcc)	Voltage	Vdc	5	
	Current	mA	18	23
Pushing Figure	MHz/V		1	
Pulling Figure	MHz		0.1	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

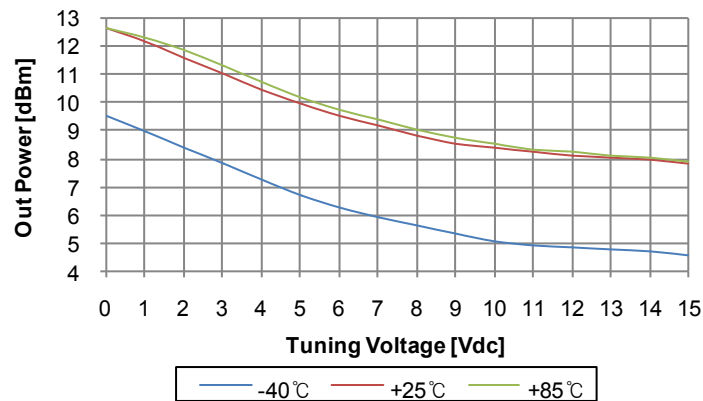
Dimensions



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	87.6	86.2	87.9	-	-	-	12.6	12.7	9.5	-7.2
1.0	93.0	91.7	94.9	5.4	5.5	7.0	12.2	12.3	9.0	-7.3
2.0	99.8	98.4	101.6	6.9	6.8	6.7	11.6	11.8	8.4	-8.2
3.0	107.1	105.6	108.6	7.2	7.2	7.1	11.0	11.3	7.8	-8.9
4.0	114.8	113.4	116.4	7.7	7.8	7.7	10.5	10.7	7.2	-9.2
5.0	123.0	121.7	124.7	8.3	8.3	8.4	9.9	10.2	6.7	-9.8
6.0	131.8	130.6	133.7	8.8	8.8	8.9	9.5	9.8	6.3	-10.1
7.0	141.0	139.8	143.0	9.2	9.2	9.4	9.2	9.4	5.9	-11.2
8.0	150.5	149.3	152.7	9.5	9.5	9.6	8.9	9.1	5.6	-12.5
9.0	160.0	158.9	162.4	9.6	9.6	9.7	8.5	8.7	5.3	-13.6
10.0	169.5	168.5	172.1	9.5	9.6	9.7	8.4	8.5	5.1	-14.2
11.0	178.9	177.9	181.7	9.4	9.4	9.6	8.2	8.4	4.9	-15.2
12.0	188.0	187.1	191.0	9.1	9.2	9.3	8.1	8.2	4.8	-15.8
13.0	196.8	195.9	199.9	8.8	8.8	9.0	8.1	8.1	4.8	-16.3
14.0	205.0	204.2	208.2	8.2	8.3	8.3	8.0	8.0	4.7	-17.8
15.0	212.7	211.9	215.9	7.7	7.7	7.7	7.8	7.9	4.6	-19.2