

Voltage Controlled Oscillator

RSW100AM

Rev. A

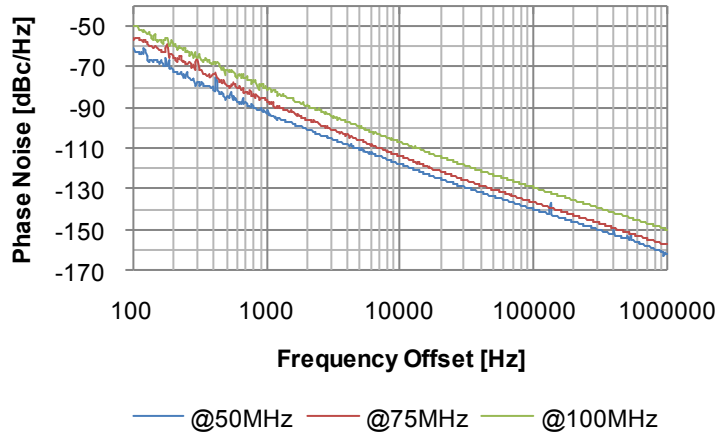
Wideband 50 to 100 MHz

Features

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

Applications

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

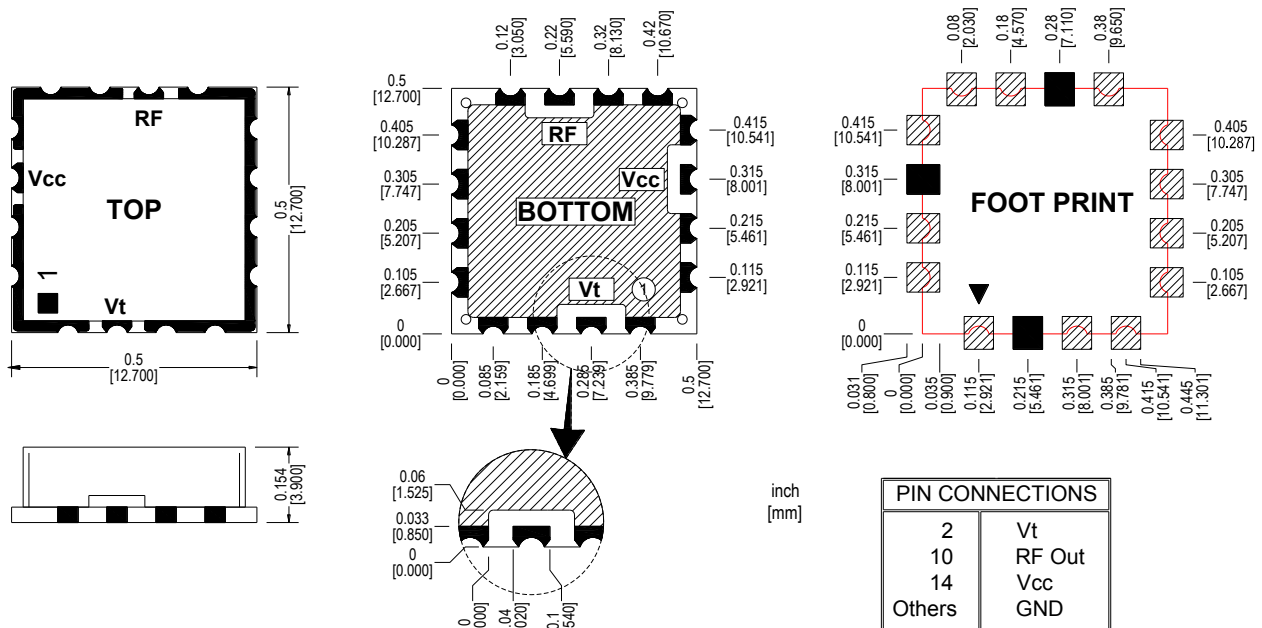


Electrical Characteristics

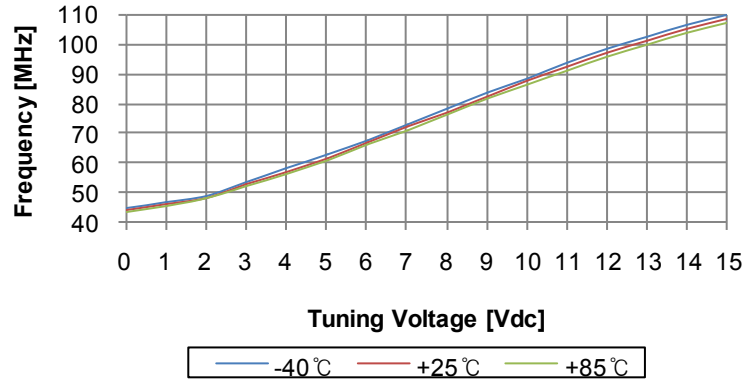


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	50		100
Output Power	dBm	+6.5	+9.5	+12.5
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-109	-104
	@100kHz offset		-129	-124
Tuning Voltage (Vt)	Vdc	+1.0		+15.0
Tuning Voltage Sensivity (Kv)	MHz/V		4 - 5	
2nd Harmonic Suppression	dBc		-18	
Power Supply (Vcc)	Voltage		5	
	Current	mA	20	25
Pushing Figure	MHz/V		0.6	
Pulling Figure	MHz		0.1	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

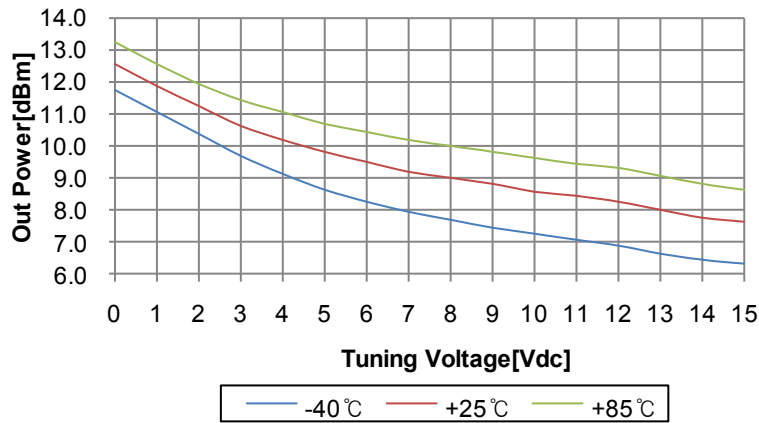
Dimensions



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	44.4	43.6	45.0	-	-	-	12.6	13.2	11.8	-6.7
1.0	46.2	45.8	46.6	1.9	2.1	1.6	11.9	12.6	11.1	-7.2
2.0	48.3	47.9	48.9	2.1	2.2	2.3	11.2	11.9	10.4	-8.2
3.0	52.6	52.0	53.4	4.3	4.0	4.5	10.6	11.4	9.7	-9.7
4.0	57.2	56.5	58.0	4.6	4.5	4.7	10.2	11.0	9.1	-11.5
5.0	62.0	61.3	62.8	4.8	4.8	4.8	9.8	10.7	8.7	-13.3
6.0	67.1	66.2	68.0	5.1	4.9	5.2	9.5	10.4	8.3	-14.8
7.0	72.3	71.4	73.2	5.2	5.1	5.2	9.2	10.2	7.9	-17.8
8.0	77.4	76.5	78.5	5.2	5.1	5.3	9.0	10.0	7.7	-20.6
9.0	82.6	81.6	83.7	5.2	5.1	5.2	8.8	9.8	7.5	-23.8
10.0	87.6	86.5	88.8	5.0	4.9	5.1	8.6	9.6	7.3	-24.8
11.0	92.5	91.4	93.8	4.9	4.9	5.0	8.4	9.5	7.1	-22.7
12.0	97.2	95.9	98.4	4.6	4.5	4.6	8.3	9.3	6.9	-20.2
13.0	101.4	100.0	102.6	4.2	4.2	4.2	8.0	9.1	6.6	-18.2
14.0	105.2	103.9	106.5	3.8	3.8	3.9	7.8	8.8	6.4	-16.7
15.0	108.8	107.3	110.0	3.6	3.5	3.5	7.6	8.6	6.3	-15.8