

Voltage Controlled Oscillator

RSW133AM

Wideband 96 to 133 MHz

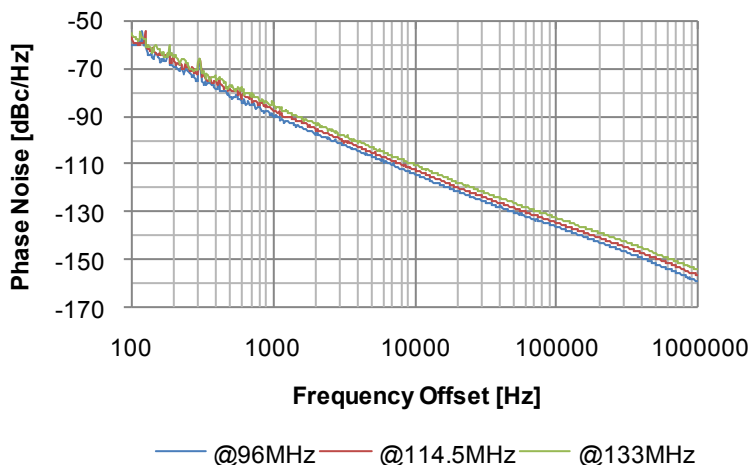
Rev. A

Features

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

Applications

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

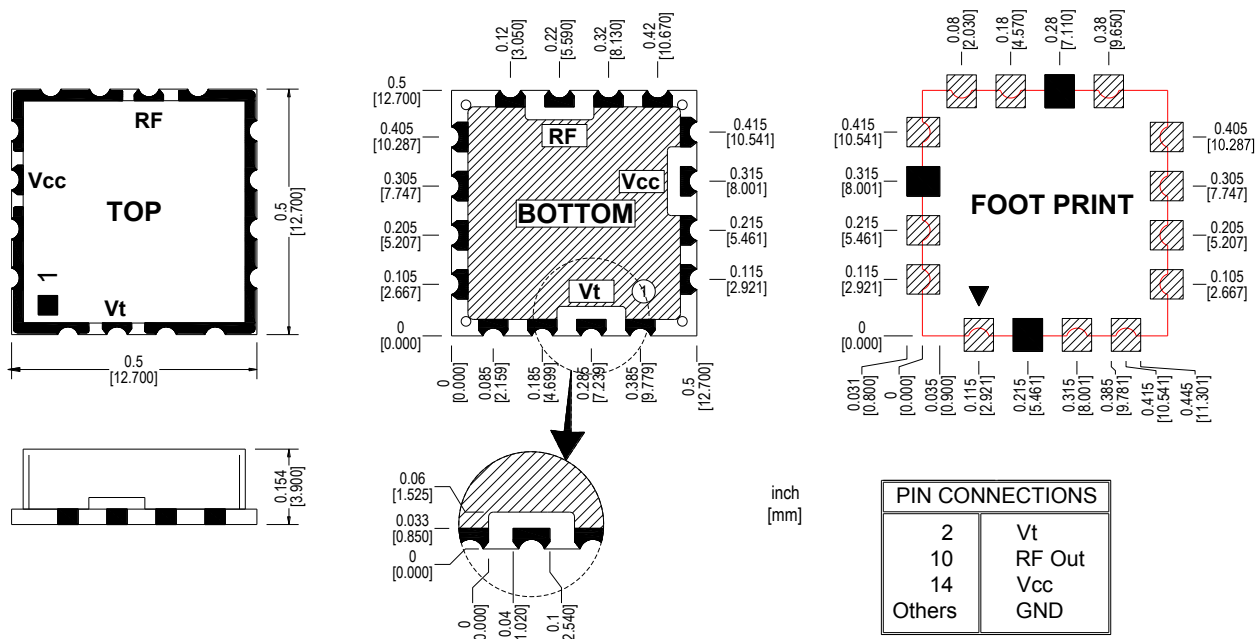


Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	96		133
Output Power	dBm	+7.0	+10.0	+13.0
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-110	-105
Phase Noise @100kHz offset	dBc/Hz		-132	-127
Tuning Voltage (Vt)	Vdc	0.0		+11.0
Tuning Voltage Sensitivity (Kv)	MHz/V		6 - 9	
2nd Harmonic Suppression	dBc		-13	
Power Supply (Vcc) Voltage	Vdc		5	
Power Supply (Vcc) Current	mA		18	25
Pushing Figure	MHz/V		0.5	
Pulling Figure	MHz		0.02	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

Dimensions

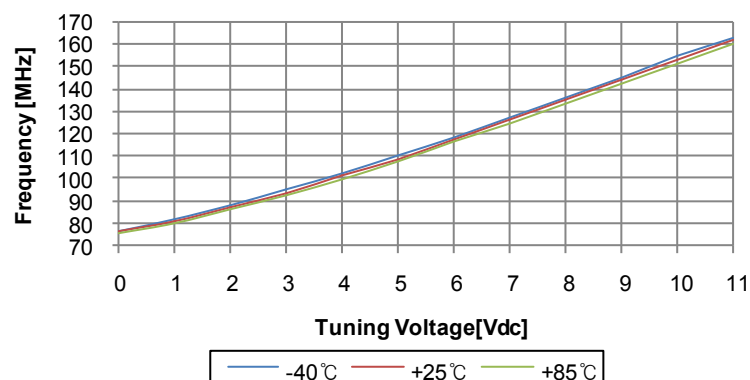


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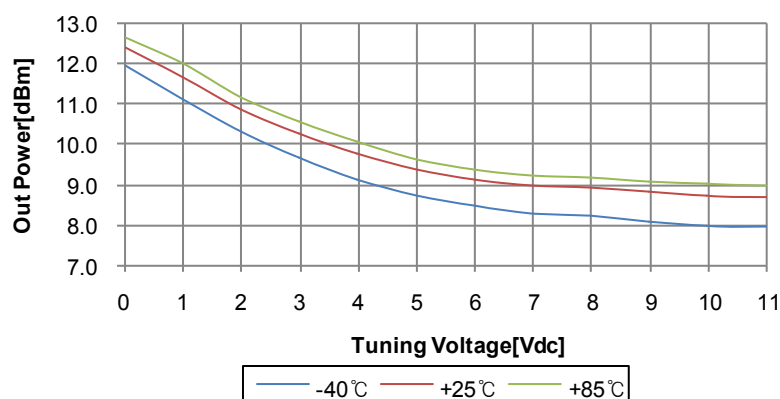
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Tuning Curve



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	76.1	75.6	76.4	-	-	-	12.4	12.7	12.0	-5.3
1.0	80.6	79.8	81.5	4.5	4.2	5.2	11.7	12.0	11.1	-6.3
2.0	87.0	86.1	88.0	6.5	6.3	6.5	10.9	11.2	10.3	-7.8
3.0	93.8	92.8	94.8	6.7	6.7	6.8	10.3	10.6	9.7	-9.7
4.0	101.1	100.0	102.1	7.3	7.2	7.4	9.8	10.1	9.1	-11.3
5.0	109.0	107.9	110.1	7.9	7.9	8.0	9.4	9.6	8.7	-12.8
6.0	117.4	116.3	118.6	8.4	8.4	8.4	9.1	9.4	8.5	-14.2
7.0	126.1	125.0	127.4	8.7	8.7	8.8	9.0	9.2	8.3	-14.7
8.0	135.0	133.8	136.4	9.0	8.8	9.0	8.9	9.2	8.2	-14.5
9.0	144.1	142.9	145.5	9.1	9.1	9.1	8.8	9.1	8.1	-14.2
10.0	153.1	151.8	154.6	9.0	8.9	9.0	8.7	9.0	8.0	-13.7
11.0	161.9	160.5	163.4	8.8	8.7	8.8	8.7	9.0	8.0	-12.8