

Voltage Controlled Oscillator

RSW150AM

Rev. A

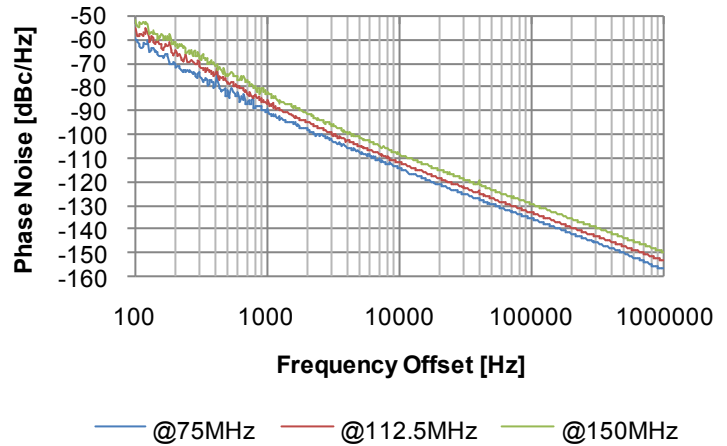
Wideband 75 to 150 MHz

Features

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

Applications

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

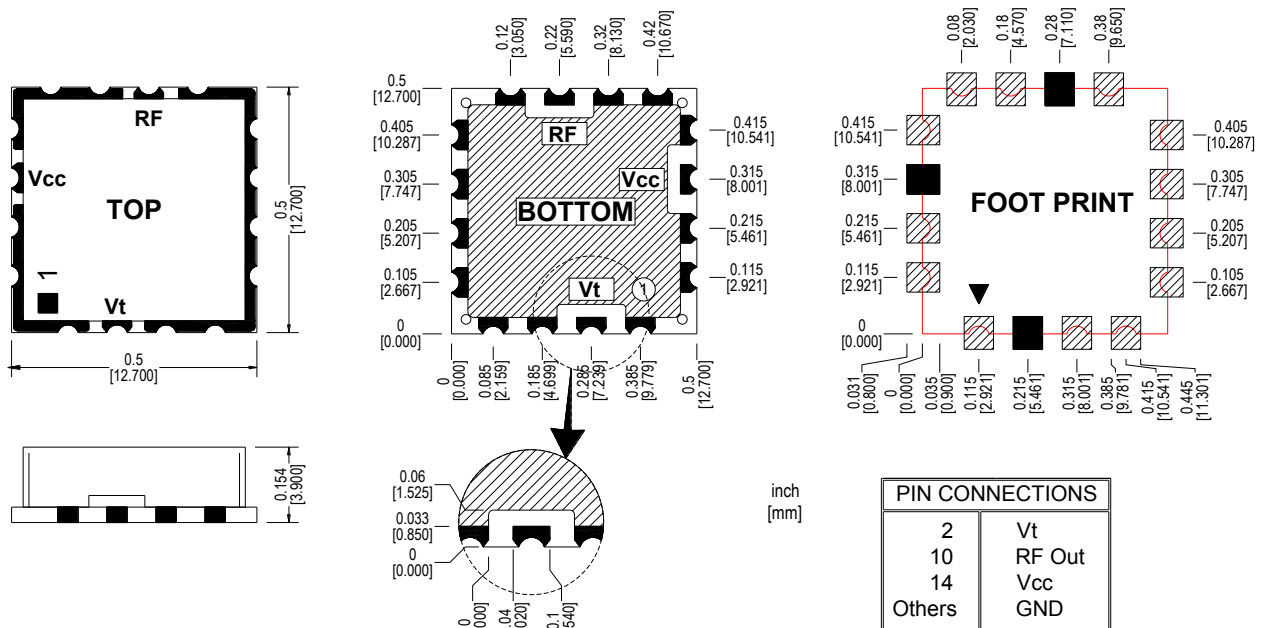


Electrical Characteristics

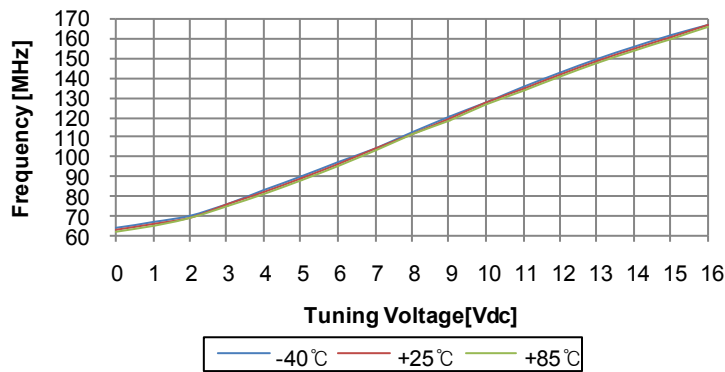


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	75		150
Output Power	dBm	+6.0	+9.0	+12.0
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-110	-105
	@100kHz offset		-130	-125
Tuning Voltage (Vt)	Vdc	+1.0		+16.0
Tuning Voltage Sensitivity (Kv)	MHz/V		6 - 7	
2nd Harmonic Suppression	dBc		-14	
Power Supply (Vcc)	Voltage		5	
	Current		18	25
Pushing Figure	MHz/V		0.5	
Pulling Figure	MHz		0.09	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

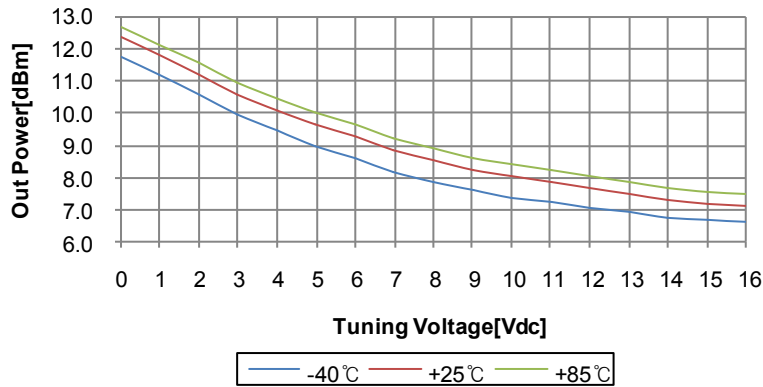
Dimensions



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	63.2	62.2	64.1	-	-	-	12.4	12.7	11.8	-6.0
1.0	66.1	65.3	66.6	2.9	3.1	2.4	11.8	12.1	11.2	-6.7
2.0	69.4	68.9	70.2	3.3	3.5	3.6	11.2	11.5	10.6	-8.0
3.0	75.6	74.8	76.4	6.1	5.9	6.2	10.6	11.0	10.0	-8.2
4.0	82.1	81.3	82.9	6.5	6.5	6.5	10.1	10.5	9.4	-9.0
5.0	89.0	88.2	89.9	6.9	6.9	7.0	9.7	10.0	9.0	-10.2
6.0	96.4	95.6	97.2	7.4	7.4	7.2	9.3	9.7	8.6	-11.3
7.0	103.9	103.1	104.7	7.6	7.6	7.6	8.9	9.3	8.2	-12.5
8.0	111.7	110.9	112.4	7.8	7.8	7.7	8.5	8.9	7.9	-13.5
9.0	119.4	118.7	120.2	7.7	7.7	7.7	8.2	8.6	7.6	-14.8
10.0	127.1	126.3	127.8	7.7	7.6	7.6	8.0	8.4	7.4	-16.0
11.0	134.5	133.8	135.2	7.4	7.5	7.4	7.9	8.3	7.2	-17.7
12.0	141.7	140.9	142.4	7.2	7.2	7.2	7.7	8.1	7.1	-18.3
13.0	148.5	147.8	149.2	6.8	6.8	6.8	7.5	7.9	6.9	-19.3
14.0	154.8	154.1	155.6	6.3	6.3	6.3	7.3	7.7	6.8	-19.8
15.0	160.7	159.9	161.4	5.9	5.8	5.8	7.2	7.6	6.7	-19.8
16.0	166.6	165.3	166.8	5.9	5.4	5.4	7.1	7.5	6.7	-19.7