

# Voltage Controlled Oscillator

# RSW760AM

Wideband 240 to 760 MHz

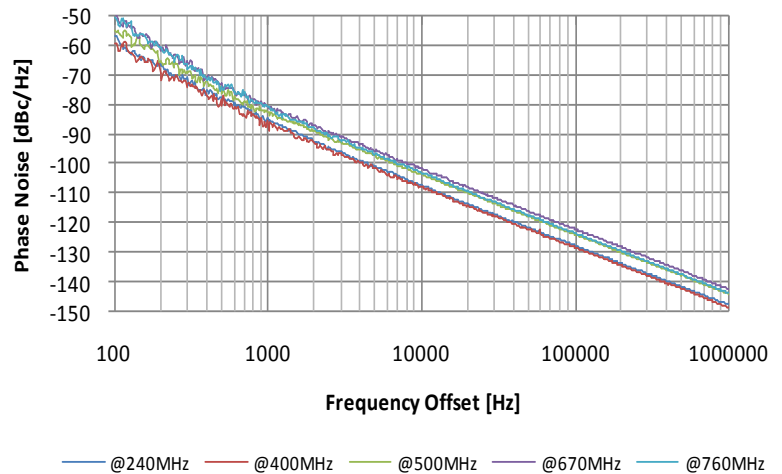
Rev. A

## Features

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

## Applications

- Base station
- Cable TV
- Satellite Communications
- UHF radio link

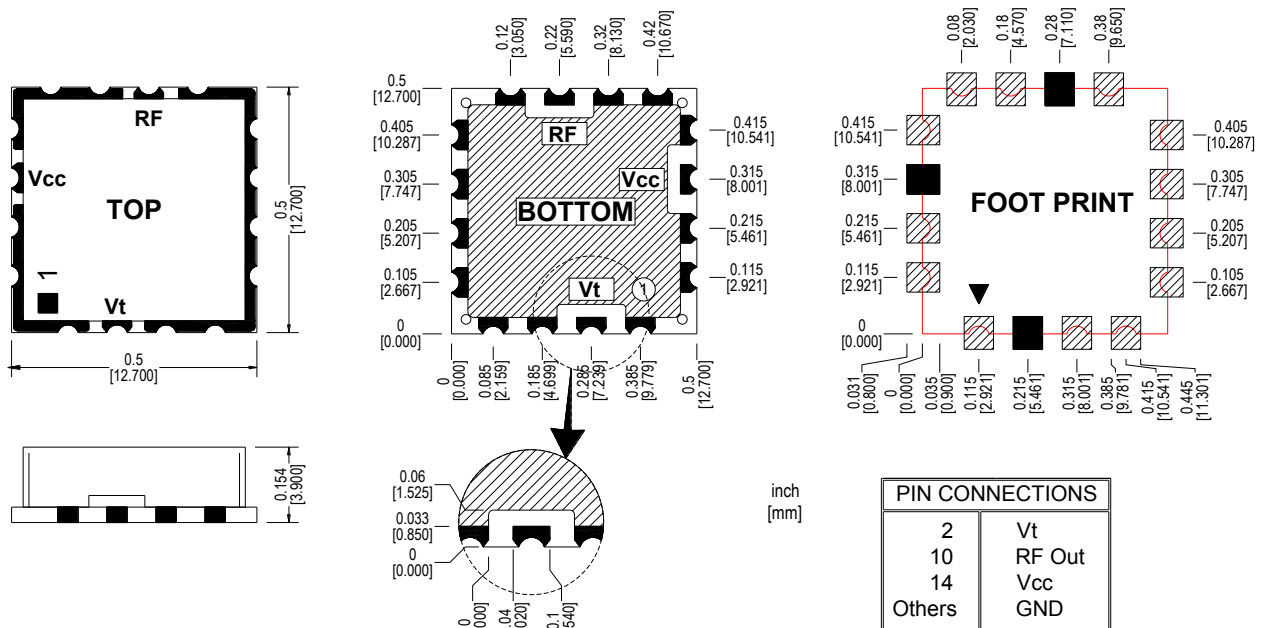


## Electrical Characteristics

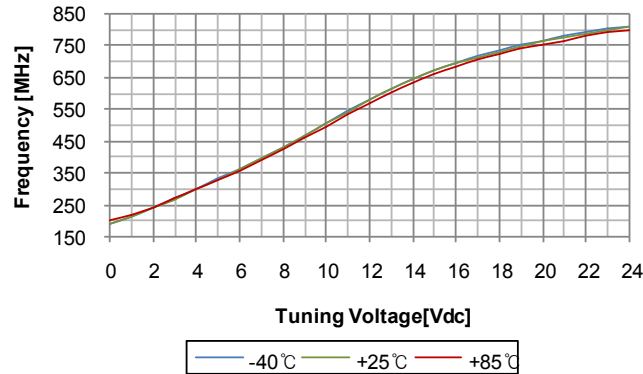


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	240		760
Output Power	dBm	+6.0	+8.0	+10.0
Output Impedance	$\Omega$		50	
Phase Noise	@10kHz offset		-106	
	@100kHz offset		-126	
Tuning Voltage (Vt)	Vdc	0.5		24.0
Tuning Voltage Sensivity (Kv)	MHz/V		14-24	
2nd Harmonic Suppression	dBc		-13	
Power Supply (Vcc)	Voltage	Vdc	5	
	Current	mA	23	30
Pushing Figure	MHz/V		3	
Pulling Figure	MHz		10	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

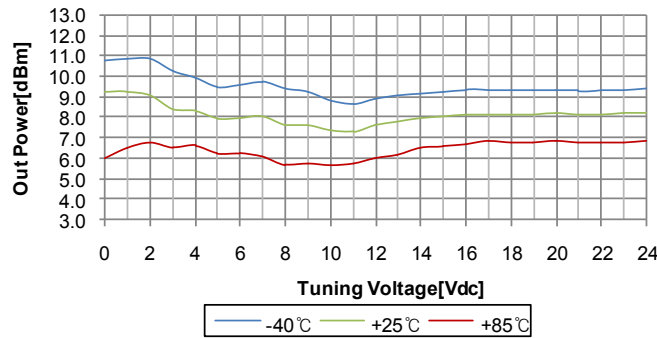
## Dimensions



## 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	187.6	198.3	189.1	-	-	-	9.3	6.0	10.8	-27.2
1.0	211.9	219.2	213.3	24.3	20.9	24.3	9.3	6.6	10.8	-23.5
2.0	239.8	243.8	240.5	27.9	24.6	27.2	9.1	6.8	10.9	-22.3
3.0	266.8	268.1	267.3	26.9	24.3	26.8	8.4	6.5	10.3	-22.6
4.0	297.3	296.2	298.0	30.5	28.1	30.8	8.4	6.6	10.0	-22.5
5.0	328.7	325.1	330.9	31.4	28.9	32.9	8.0	6.3	9.5	-19.6
6.0	362.0	357.2	364.5	33.3	32.1	33.5	8.0	6.3	9.6	-17.8
7.0	396.1	390.7	399.1	34.1	33.4	34.6	8.1	6.1	9.8	-15.6
8.0	429.1	424.2	432.4	33.0	33.5	33.3	7.7	5.7	9.4	-13.7
9.0	465.0	460.5	466.9	35.8	36.4	34.4	7.6	5.8	9.3	-12.5
10.0	503.0	496.7	504.1	38.0	36.2	37.2	7.4	5.7	8.9	-12.6
11.0	540.1	532.0	543.1	37.1	35.3	39.0	7.3	5.8	8.7	-12.7
12.0	578.4	568.9	581.4	38.3	36.9	38.3	7.6	6.1	8.9	-12.9
13.0	612.9	602.4	615.9	34.5	33.5	34.5	7.8	6.2	9.1	-13.1
14.0	642.6	633.2	645.4	29.6	30.7	29.5	7.9	6.5	9.2	-13.8
15.0	669.7	660.3	672.4	27.1	27.1	27.0	8.1	6.6	9.3	-14.8
16.0	693.0	684.0	695.9	23.3	23.7	23.6	8.1	6.7	9.4	-13.4
17.0	712.7	704.6	715.8	19.7	20.7	19.8	8.2	6.9	9.4	-15.1
18.0	731.1	722.5	734.5	18.4	17.9	18.7	8.2	6.8	9.4	-15.5
19.0	747.6	739.3	750.7	16.4	16.8	16.3	8.2	6.8	9.3	-15.9
20.0	761.8	754.0	765.0	14.2	14.7	14.3	8.2	6.9	9.3	-16.2
21.0	775.2	766.8	778.8	13.4	12.9	13.8	8.1	6.8	9.3	-16.1
22.0	787.7	779.3	791.1	12.5	12.5	12.4	8.1	6.8	9.3	-16.3
23.0	799.0	790.8	802.4	11.3	11.5	11.3	8.2	6.8	9.3	-16.3
24.0	809.0	801.2	812.2	10.0	10.3	9.9	8.3	6.9	9.4	-16.9