

# Voltage Controlled Oscillator

# RS882AM

Optimized band 869 to 894 MHz

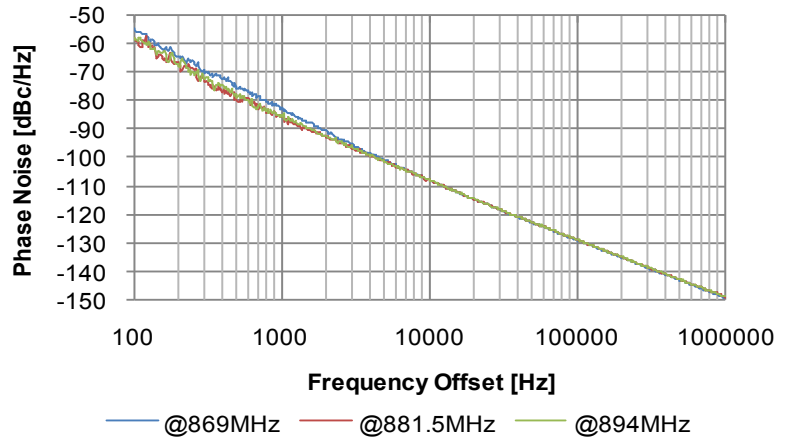
Rev. A

## Features

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

## Applications

- SATCOM
- Receiver
- Test Equipment
- Radar
- Point-to-Point
- Radio
- MMDS
- WiMax

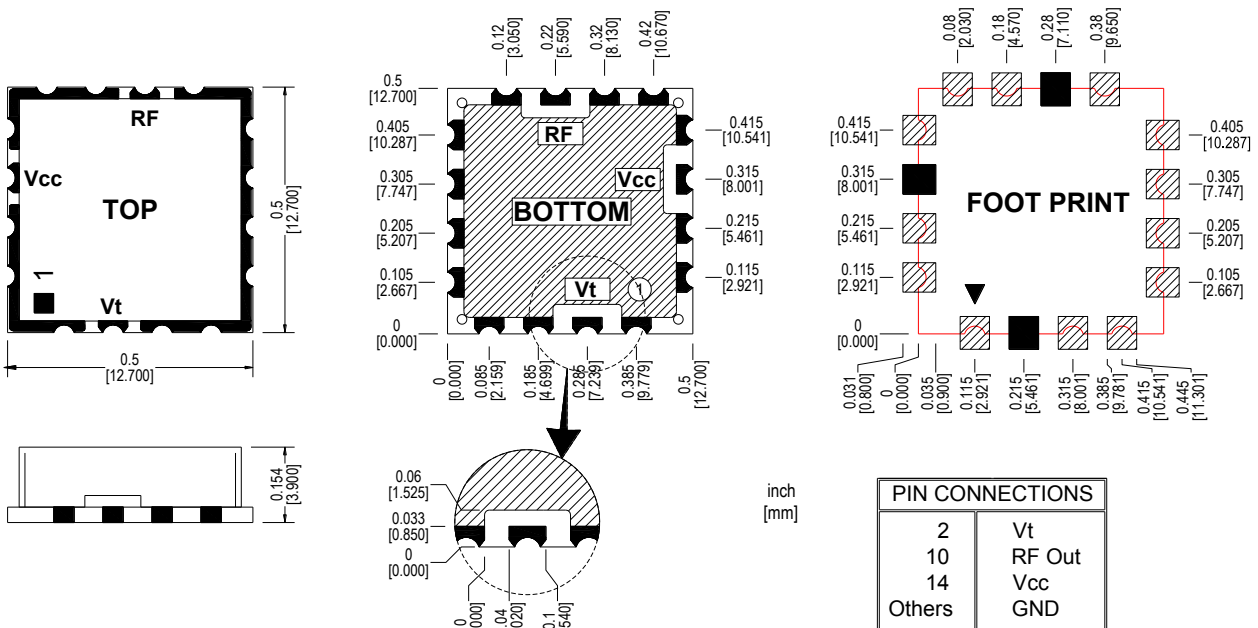


## Electrical Characteristics

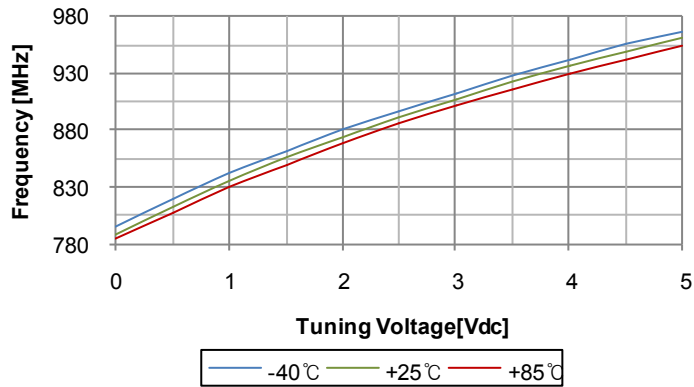


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	869		894
Output Power	dBm		+3.0	
Output Impedance	$\Omega$		50	
Phase Noise	@10kHz offset		-107	
	@100kHz offset		-127	
Tuning Voltage (Vt)	Vdc	1.3		3.5
Tuning Voltage Sensitivity (Kv)	MHz/V		17-20	
2nd Harmonic Suppression	dBc		-12	
Power Supply (Vcc)	Voltage		5	
	Current		20	
Pushing Figure	MHz/V		0.8	
Pulling Figure	MHz		0.2	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

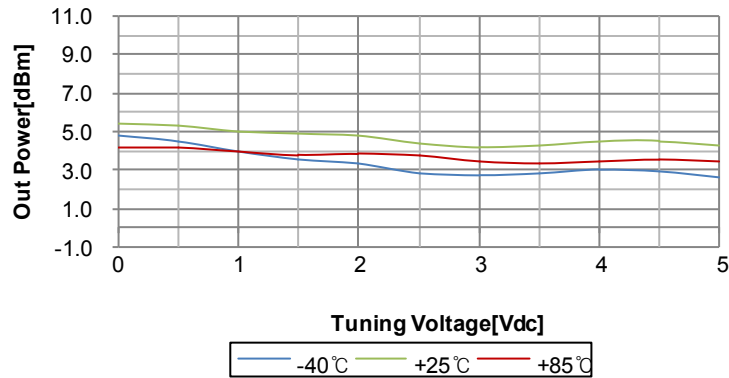
## Dimensions



## Tuning Curve



## Output Power Curve



## Performance Data

V <sub>t</sub> [Vdc]	Frequency [MHz]			K <sub>v</sub> [MHz/0.5V]			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	788.3	784.0	796.0	-	-	-	5.4	4.1	4.7	-16.5
0.5	812.9	807.2	820.2	24.6	23.2	24.2	5.3	4.1	4.5	-14.3
1.0	835.8	829.9	842.6	23.0	22.7	22.3	5.0	3.9	3.9	-13.1
1.5	856.3	850.3	862.5	20.4	20.4	20.0	4.8	3.8	3.5	-12.5
2.0	874.6	868.7	880.5	18.4	18.4	18.0	4.7	3.8	3.3	-12.3
2.5	891.6	885.6	897.1	17.0	16.9	16.6	4.4	3.7	2.9	-12.3
3.0	907.3	901.1	912.6	15.7	15.6	15.6	4.2	3.4	2.7	-13.3
3.5	922.2	915.8	927.6	15.0	14.7	15.0	4.3	3.4	2.8	-14.2
4.0	936.5	929.7	942.0	14.3	13.9	14.4	4.5	3.4	3.0	-15.3
4.5	949.8	942.8	955.3	13.3	13.1	13.2	4.5	3.5	2.9	-16.3
5.0	962.0	954.9	967.3	12.2	12.1	12.0	4.2	3.4	2.6	-17.7