

Voltage Controlled Oscillator

RSW400AM

Wideband 200 to 400 MHz

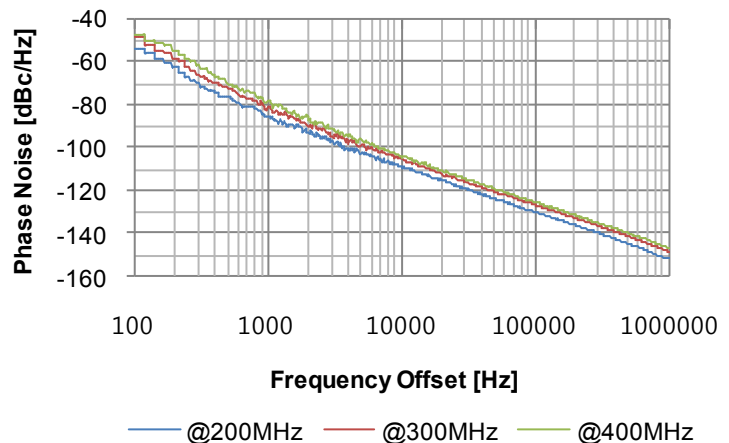
Rev. A

Features

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

Applications

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

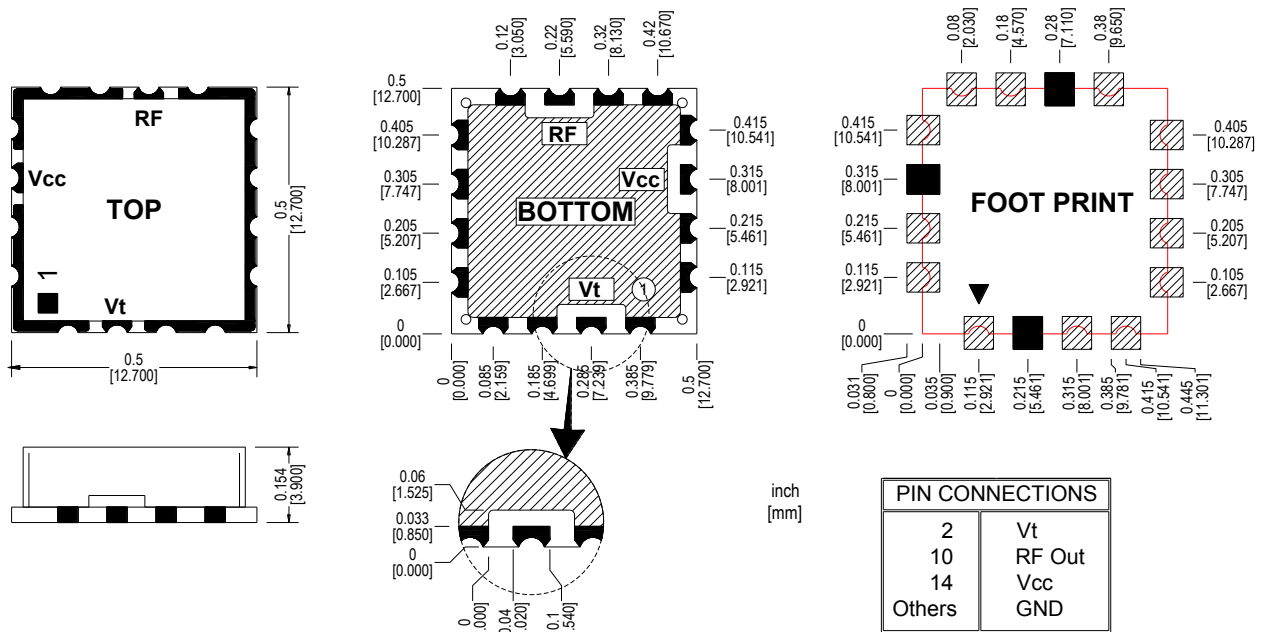


Electrical Characteristics

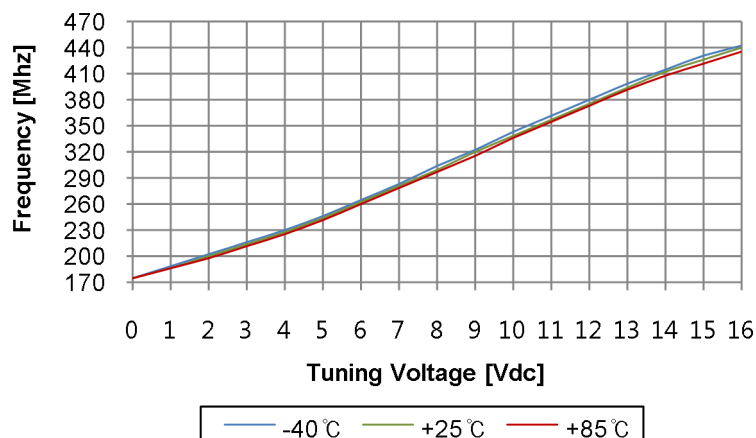


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	200		400
Output Power	dBm	+8.0	+11.0	+14.0
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-104	-99
Phase Noise @100kHz offset	dBc/Hz		-126	-121
Tuning Voltage (Vt)	Vdc	1.0		16.0
Tuning Voltage Sensitivity (Kv)	MHz/V		12 - 20	
2nd Harmonic Suppression	dBc		-10	
Power Supply (Vcc) Voltage	Vdc		5	
Power Supply (Vcc) Current	mA		18	25
Pushing Figure	MHz/V		0.1	
Pulling Figure	MHz		0.48	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

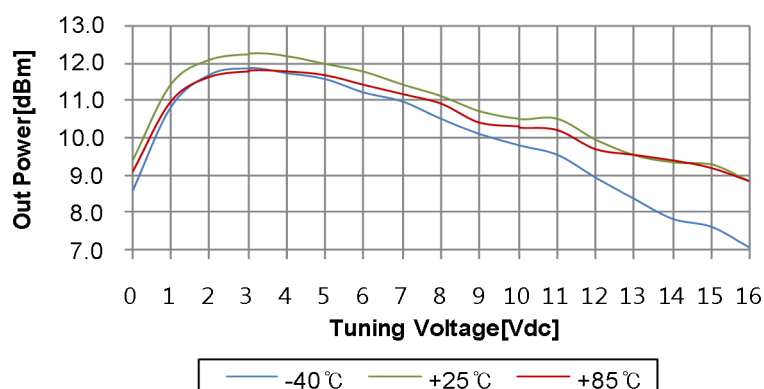
Dimensions



■ 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	173.4	172.7	174.8	-	-	-	9.4	9.1	8.6	-7
1.0	186.6	185.1	188.4	13.1	12.4	13.6	11.4	11.0	10.8	-6
2.0	199.0	197.2	201.2	12.5	12.1	12.7	12.1	11.6	11.7	-5
3.0	212.5	210.4	214.8	13.4	13.2	13.7	12.2	11.8	11.8	-5
4.0	227.5	225.2	230.1	15.0	14.8	15.3	12.2	11.8	11.7	-6
5.0	244.3	241.6	246.8	16.8	16.4	16.6	12.0	11.7	11.6	-5
6.0	262.1	259.3	265.0	17.8	17.7	18.2	11.8	11.4	11.2	-7
7.0	280.6	277.8	283.3	18.5	18.5	18.4	11.4	11.1	11.0	-7
8.0	299.6	296.5	302.9	19.0	18.8	19.6	11.1	10.9	10.5	-7
9.0	319.0	316.2	321.9	19.4	19.6	19.0	10.7	10.4	10.1	-7
10.0	338.9	335.2	342.1	19.9	19.1	20.2	10.5	10.3	9.8	-8
11.0	357.4	353.7	361.3	18.5	18.5	19.2	10.5	10.2	9.5	-7
12.0	376.4	373.4	379.6	19.1	19.7	18.3	10.0	9.7	8.9	-8
13.0	395.3	391.8	399.1	18.8	18.4	19.5	9.5	9.5	8.4	-9
14.0	412.2	408.4	416.4	16.9	16.6	17.3	9.4	9.4	7.8	-9
15.0	426.7	422.6	430.9	14.5	14.2	14.5	9.3	9.2	7.6	-9
16.0	439.7	436.0	443.8	13.0	13.4	12.9	8.8	8.8	7.1	-9