

Voltage Controlled Oscillator

RSO2115AM

Ultra Low Noise 2020 to 2210 MHz

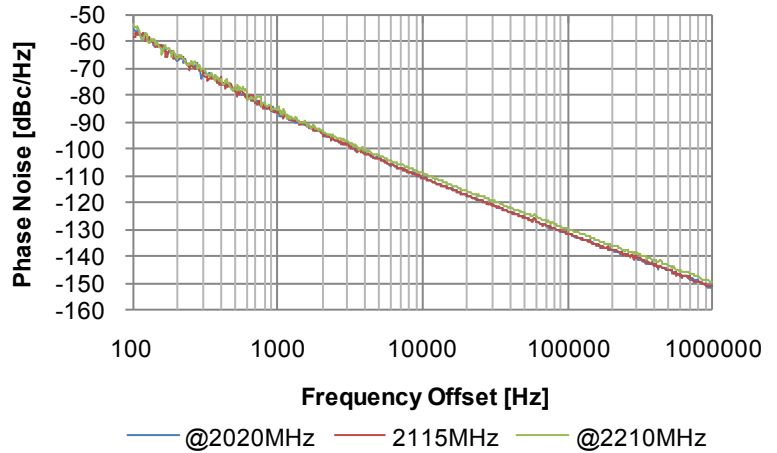
Rev. A

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

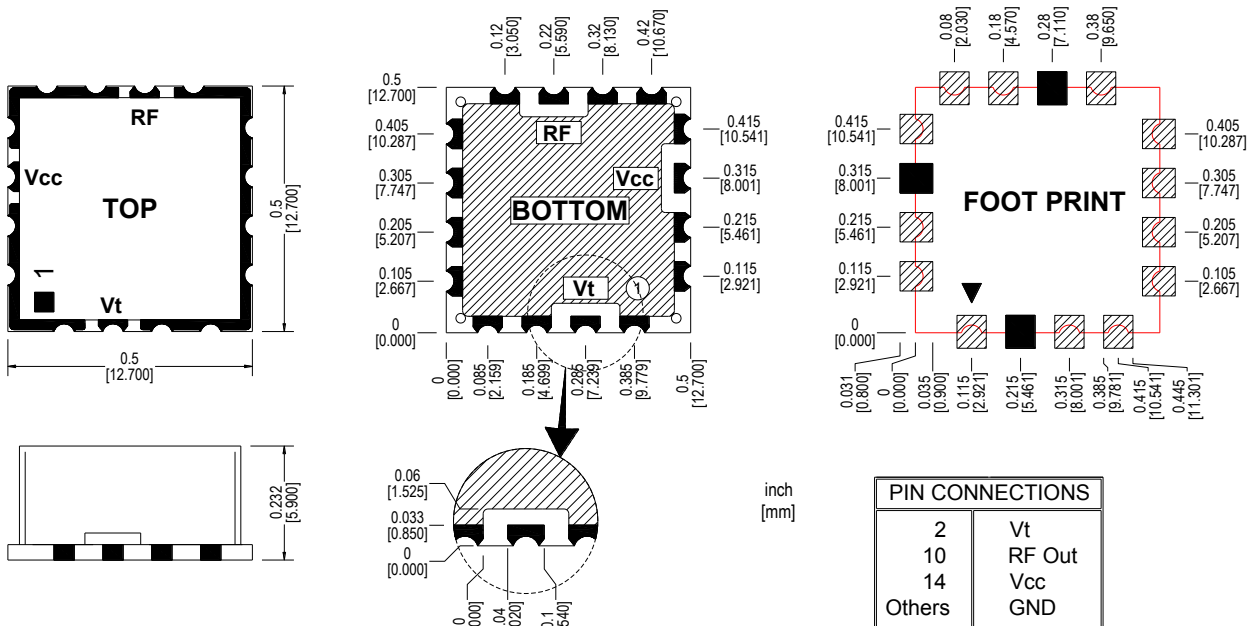


Electrical Characteristics

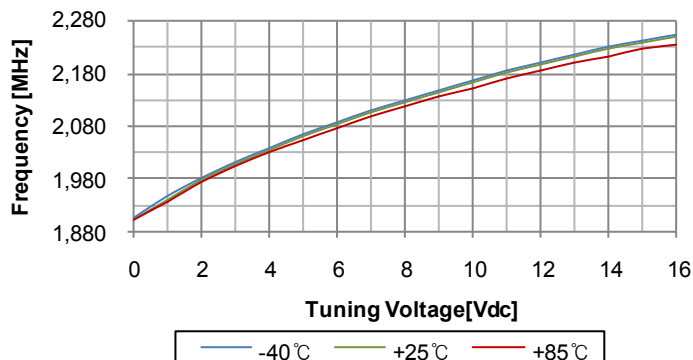


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	2020		2210
Output Power	dBm		3.0	
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-108	
	@100kHz offset		-128	
Tuning Voltage (Vt)	Vdc	1.0		16.0
Tuning Voltage Sensitivity (Kv)	MHz/V		15	
2nd Harmonic Suppression	dBc		-26	
Power Supply (Vcc)	Voltage		5	
	Current		28	
Pushing Figure	MHz/V		1.2	
Pulling Figure	MHz		1	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

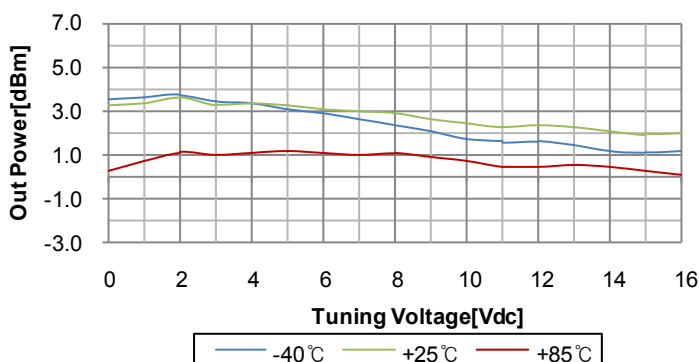
Dimensions



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	1900.6	1901.1	1904.8	-	-	-	3.2	0.3	3.5	-28.7
1.0	1941.4	1937.9	1945.7	40.8	36.9	40.8	3.3	0.7	3.6	-28.3
2.0	1976.8	1972.0	1980.9	35.4	34.0	35.2	3.6	1.1	3.7	-27.8
3.0	2007.6	2002.0	2011.6	30.8	30.0	30.7	3.3	0.9	3.4	-27.1
4.0	2035.3	2028.9	2039.2	27.6	26.9	27.6	3.4	1.1	3.3	-28.6
5.0	2060.5	2053.4	2064.3	25.2	24.5	25.1	3.2	1.1	3.1	-28.3
6.0	2083.6	2075.8	2087.5	23.2	22.5	23.2	3.1	1.0	2.8	-28.7
7.0	2105.1	2096.6	2108.9	21.4	20.7	21.4	3.0	1.0	2.6	-29.1
8.0	2125.3	2116.0	2129.0	20.2	19.4	20.2	2.9	1.0	2.3	-30.3
9.0	2144.2	2134.2	2147.9	18.9	18.2	18.9	2.6	0.9	2.0	-30.5
10.0	2162.0	2151.4	2165.9	17.9	17.2	18.0	2.4	0.7	1.7	-31.1
11.0	2179.2	2167.8	2183.0	17.2	16.4	17.2	2.2	0.5	1.6	-31.5
12.0	2195.5	2183.4	2199.5	16.3	15.6	16.4	2.3	0.4	1.6	-31.8
13.0	2211.0	2198.3	2215.2	15.5	14.8	15.7	2.3	0.5	1.4	-32.2
14.0	2225.1	2212.0	2229.2	14.1	13.8	14.1	2.0	0.4	1.1	-32.5
15.0	2237.2	2223.9	2241.6	12.1	11.9	12.4	1.9	0.2	1.1	-33.5
16.0	2247.2	2233.8	2251.6	10.0	9.9	10.0	1.9	0.0	1.1	-34.1