

Voltage Controlled Oscillator

RSO2148AH

Ultra Low Noise 2085 to 2210 MHz

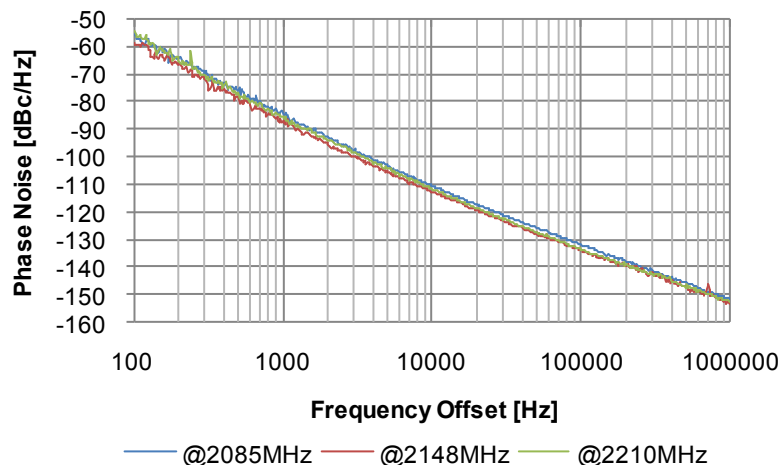
Rev. A

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

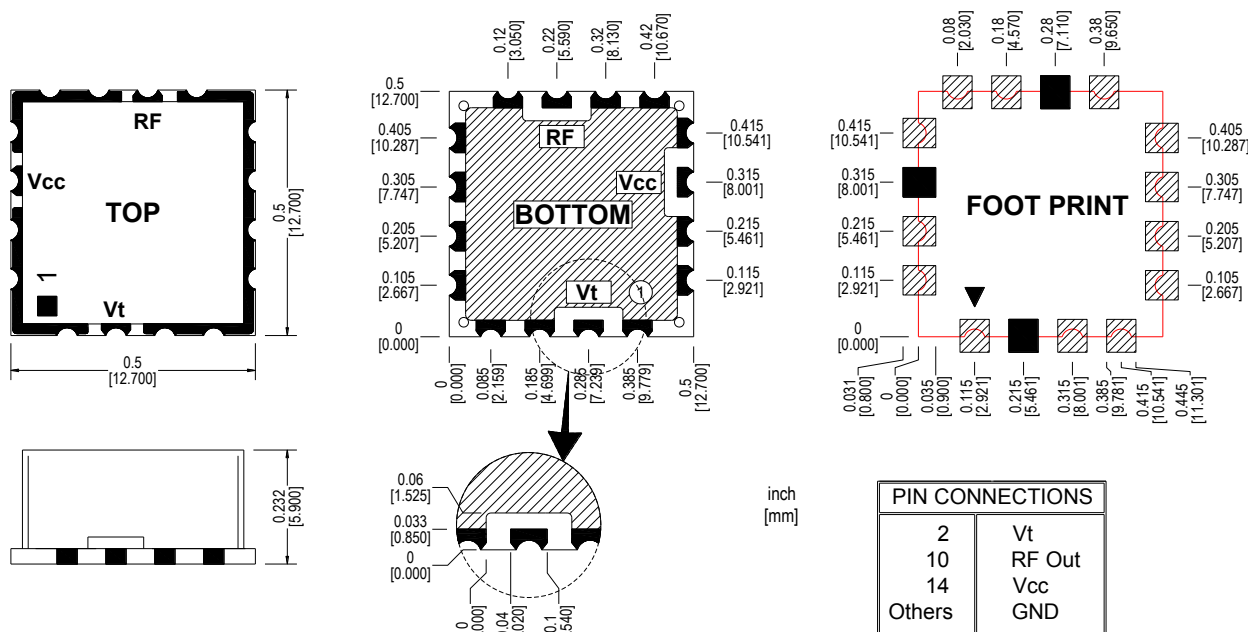


Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	2085		2210
Output Power	dBm		5.0	
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-112	
Phase Noise @100kHz offset	dBc/Hz		-122	
Tuning Voltage (Vt)	Vdc	0.0		11.0
Tuning Voltage Sensitivity (Kv)	MHz/V		14-35	
2nd Harmonic Suppression	dBc		-31	
Power Supply (Vcc) Voltage	Vdc		12	
Power Supply (Vcc) Current	mA		48	
Pushing Figure	MHz/V		1	
Pulling Figure	MHz		0.2	
Input Capacitance	pF		100	
Operating Temp. Range	°C	-40		+85

Dimensions

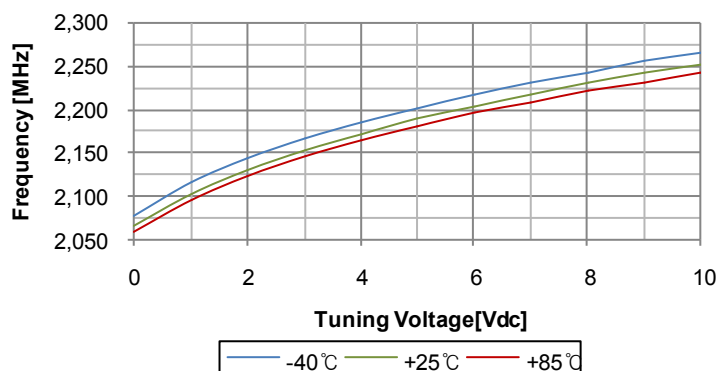


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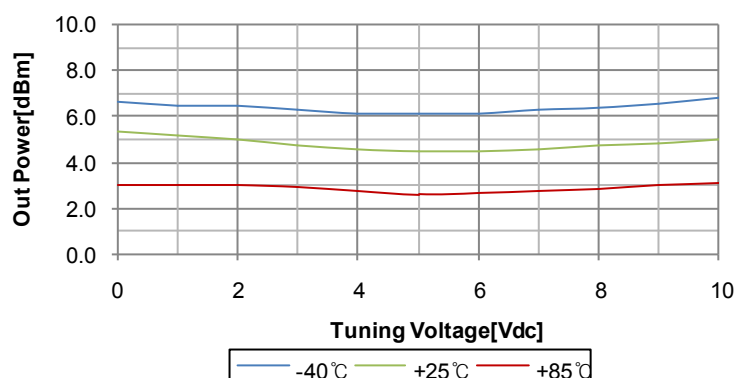
RS02148AH

Rev. A

■ 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	2065.2	2059.3	2078.4	-	-	-	5.3	3.0	6.6	-32.1
1.0	2102.7	2095.8	2115.7	37.4	36.5	37.3	5.2	3.0	6.5	-30.1
2.0	2130.5	2123.8	2143.4	27.8	28.0	27.6	5.0	3.0	6.4	-30.5
3.0	2153.0	2145.9	2165.8	22.5	22.1	22.4	4.8	2.9	6.3	-31.1
4.0	2172.0	2164.6	2184.9	19.1	18.7	19.1	4.5	2.7	6.1	-31.6
5.0	2188.9	2180.9	2201.7	16.9	16.3	16.8	4.4	2.6	6.1	-32.5
6.0	2203.9	2195.5	2217.0	15.0	14.5	15.2	4.5	2.6	6.1	-32.7
7.0	2217.6	2208.6	2230.7	13.7	13.2	13.8	4.6	2.7	6.3	-32.5
8.0	2230.1	2220.7	2243.3	12.5	12.1	12.6	4.7	2.9	6.3	-31.8
9.0	2241.7	2231.9	2255.1	11.6	11.1	11.8	4.8	3.0	6.5	-31.8
10.0	2252.5	2242.4	2266.0	10.8	10.5	10.9	5.0	3.1	6.8	-31.6
11.0	2262.6	2252.2	2276.3	10.1	9.9	10.2	5.2	3.3	7.0	-32.1