

Voltage Controlled Oscillator

RSO2175AH

Ultra Low Noise 2165 to 2185 MHz

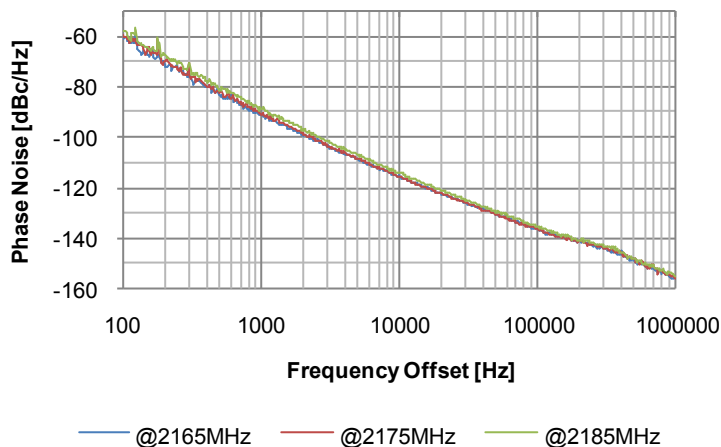
Rev. A

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

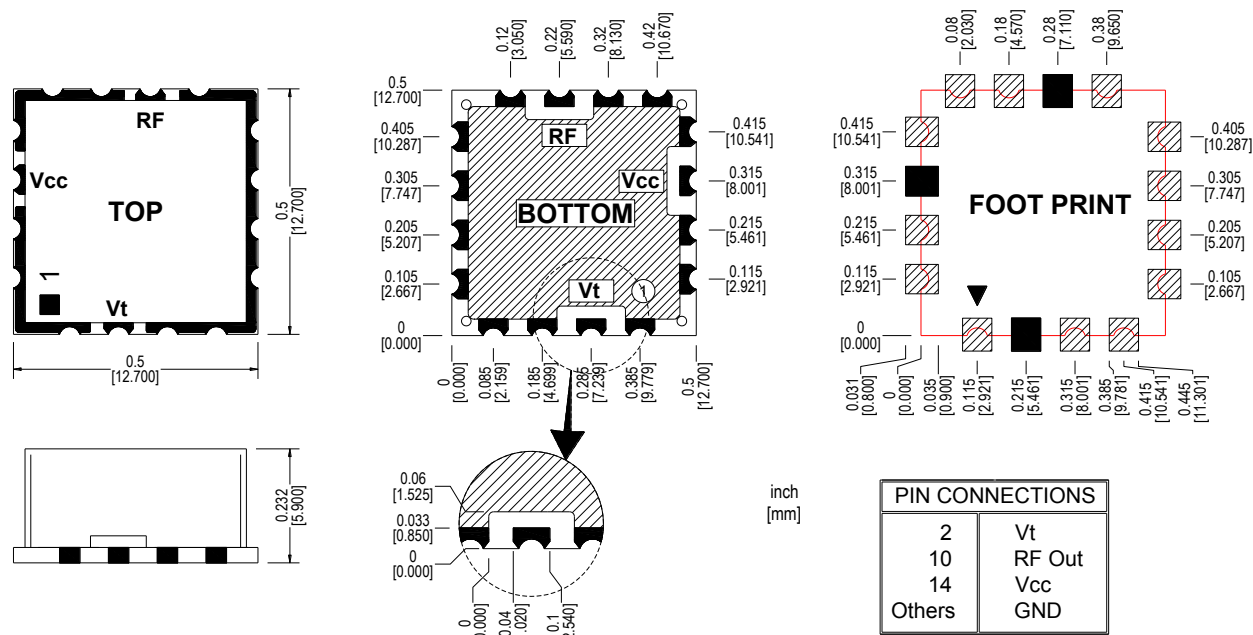


Electrical Characteristics

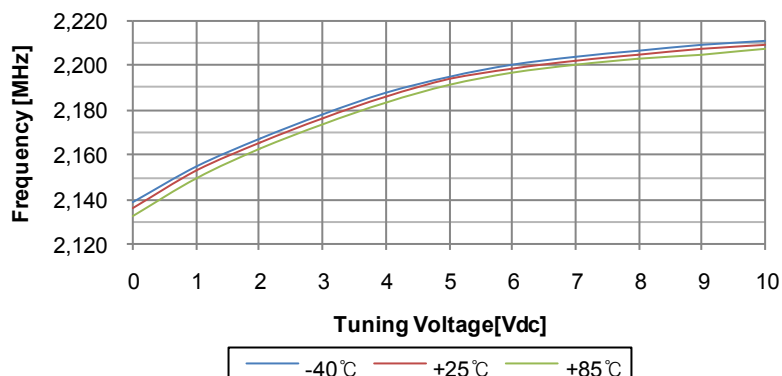


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	2165		2185
Output Power	dBm	3.0	6.0	
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-114	-109
	@100kHz offset		-134	-129
Tuning Voltage (Vt)	Vdc	+1.0		+7.0
Tuning Voltage Sensitivity (Kv)	MHz/V		9 - 12	
2nd Harmonic Suppression	dBc		-13	
Power Supply (Vcc)	Voltage		8	
	Current		28	33
Pushing Figure	MHz/V		0.1	
Pulling Figure	MHz		1.8	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

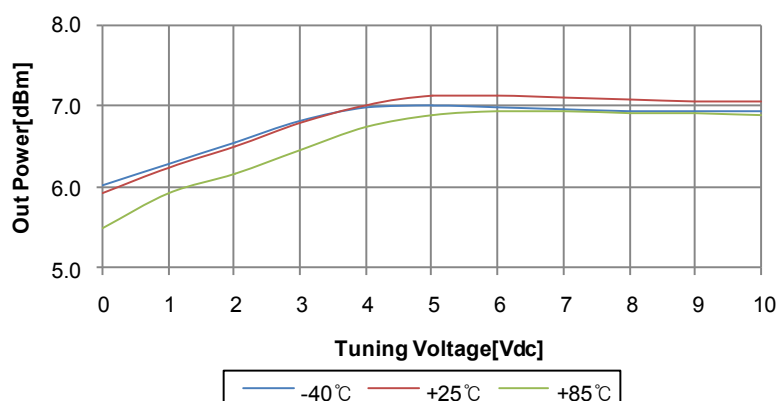
Dimensions



■ 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	2136.1	2132.4	2138.6	-	-	-	5.9	5.5	6.0	-14.8
1.0	2152.6	2149.6	2154.5	16.5	17.2	15.9	6.2	5.9	6.3	-13.8
2.0	2165.3	2162.5	2167.1	12.7	12.9	12.6	6.5	6.2	6.6	-13.2
3.0	2176.6	2173.9	2178.4	11.3	11.4	11.3	6.8	6.5	6.8	-13.2
4.0	2186.3	2183.6	2188.0	9.7	9.7	9.6	7.0	6.7	7.0	-13.0
5.0	2193.7	2191.1	2195.3	7.4	7.5	7.3	7.1	6.9	7.0	-12.6
6.0	2198.9	2196.4	2200.4	5.2	5.3	5.2	7.1	6.9	7.0	-13.1
7.0	2202.6	2200.1	2204.0	3.6	3.6	3.5	7.1	6.9	7.0	-13.2
8.0	2205.2	2202.8	2206.6	2.7	2.7	2.6	7.1	6.9	6.9	-12.8
9.0	2207.5	2205.1	2208.9	2.2	2.4	2.3	7.1	6.9	6.9	-13.5
10.0	2209.6	2207.2	2210.9	2.1	2.0	2.0	7.1	6.9	6.9	-13.2