

Voltage Controlled Oscillator

RS1843AM

Optimized band 1805 to 1880 MHz

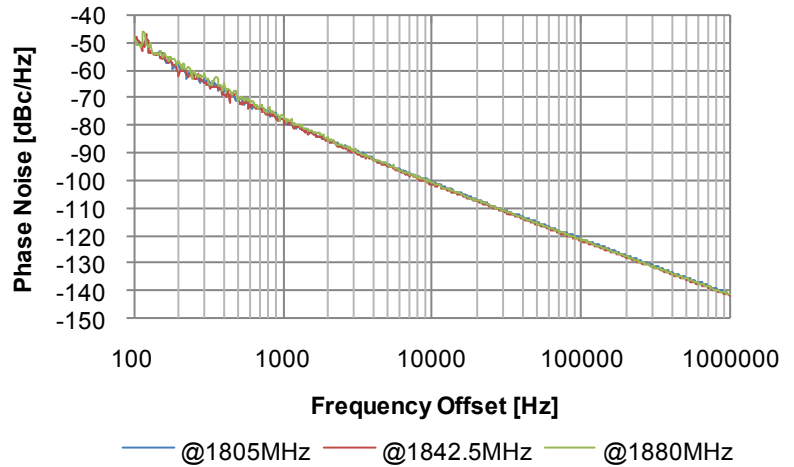
Rev. A

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

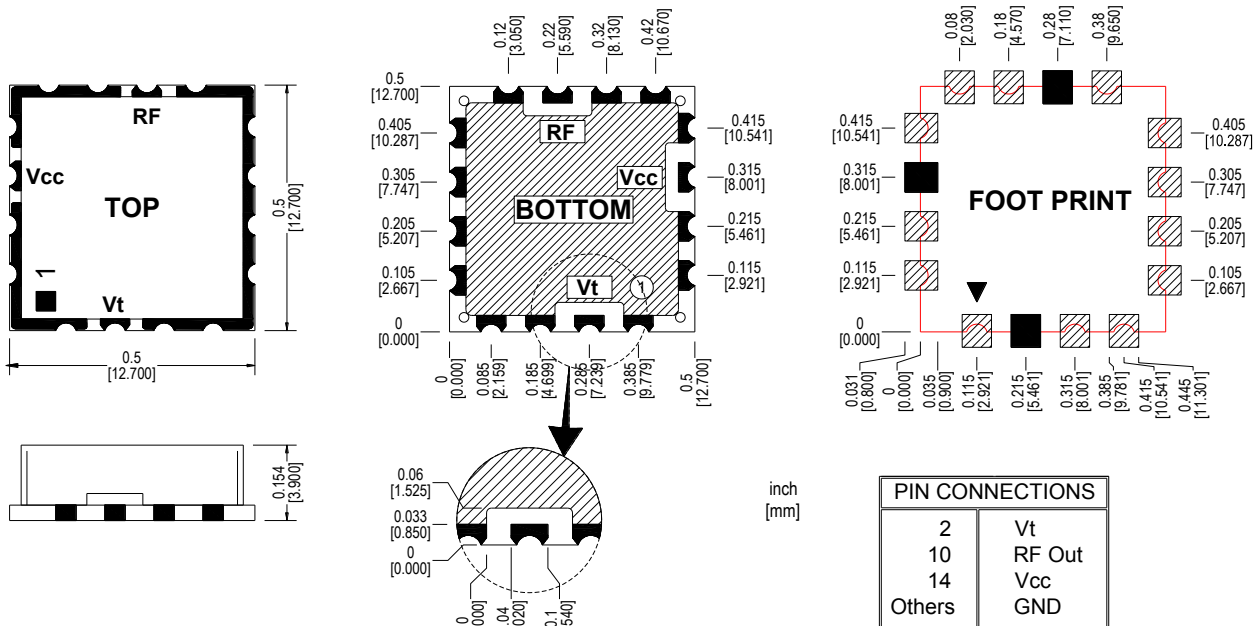


Electrical Characteristics

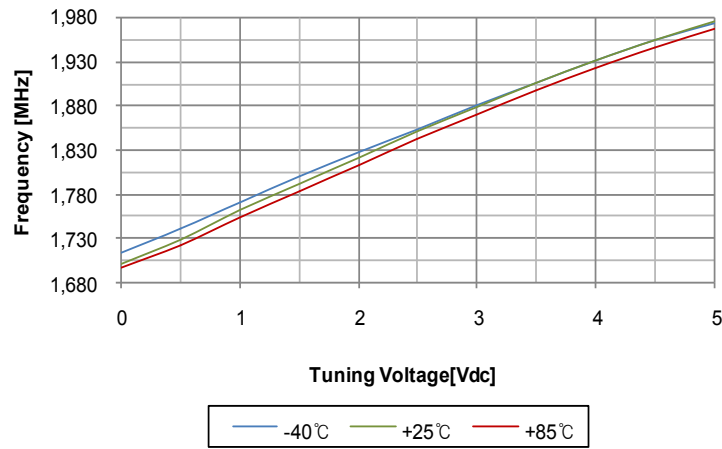


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	1805		1880
Output Power	dBm		5.0	
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-99	
	@100kHz offset		-120	
Tuning Voltage (Vt)	Vdc	1.3		3.5
Tuning Voltage Sensitivity (Kv)	MHz/V		28	
2nd Harmonic Suppression	dBc		-12	
Power Supply (Vcc)	Voltage		5	
	Current		18	
Pushing Figure	MHz/V		1.7	
Pulling Figure	MHz		0.8	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

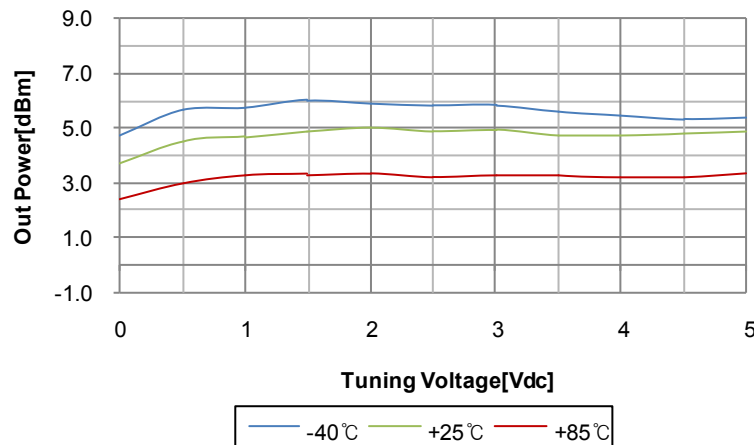
Dimensions



Tuning Curve



Output Power Curve



Performance Data

Vt [Vdc]	Frequency [MHz]			Kv [MHz/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	1701.5	1696.2	1714.2	-	-	-	3.7	2.4	4.7	-22.1
0.5	1729.5	1723.3	1740.9	28.0	27.1	26.7	4.5	3.0	5.6	-16.1
1.0	1761.6	1754.8	1771.4	32.1	31.4	30.5	4.7	3.2	5.7	-14.1
1.5	1791.9	1784.5	1799.8	30.3	29.8	28.4	4.8	3.3	6.0	-13.5
2.0	1821.4	1813.4	1827.3	29.6	28.9	27.5	5.0	3.4	5.9	-12.5
2.5	1850.2	1841.7	1854.0	28.7	28.4	26.7	4.9	3.2	5.8	-11.5
3.0	1878.4	1869.6	1880.3	28.2	27.8	26.4	4.9	3.3	5.8	-12.5
3.5	1905.7	1896.8	1905.7	27.3	27.3	25.4	4.7	3.2	5.6	-11.5
4.0	1931.5	1922.6	1930.6	25.7	25.8	24.9	4.7	3.2	5.5	-11.6
4.5	1955.2	1946.5	1953.7	23.7	23.9	23.0	4.8	3.2	5.3	-12.1
5.0	1976.4	1968.0	1973.4	21.2	21.5	19.7	4.9	3.3	5.4	-12.1