

Voltage Controlled Oscillator

RS1960AM

Optimized band 1930 to 1990 MHz

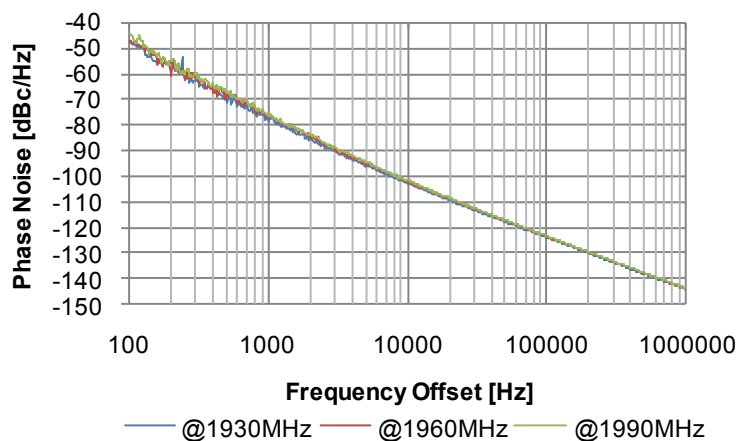
Rev. A

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

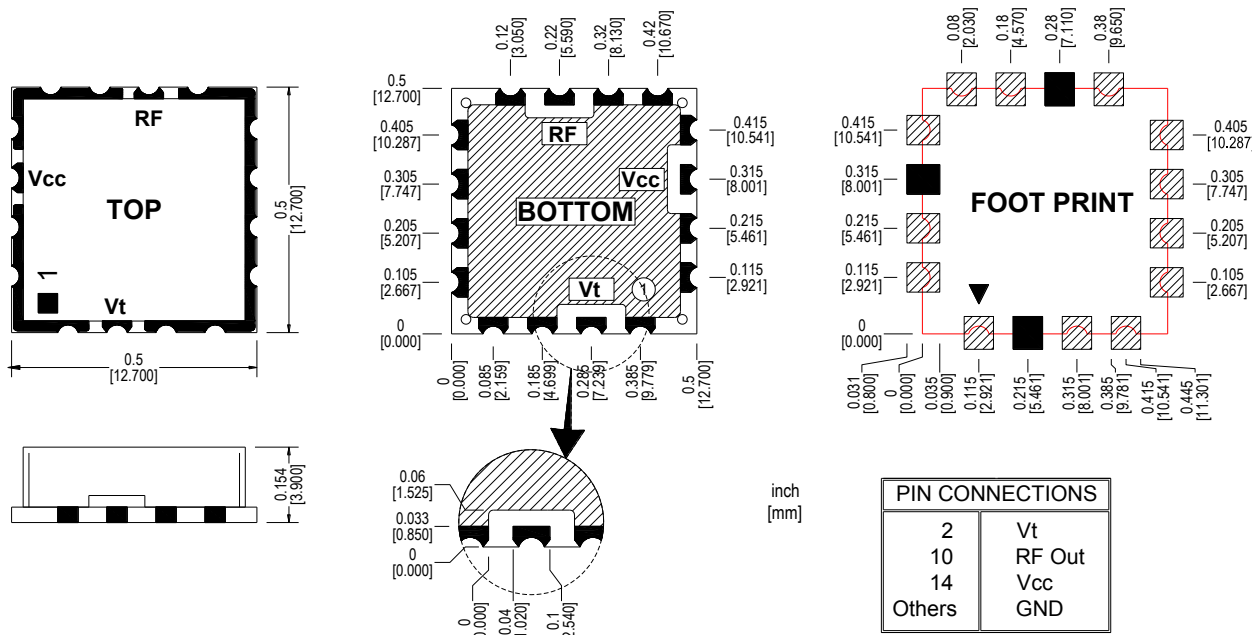


Electrical Characteristics

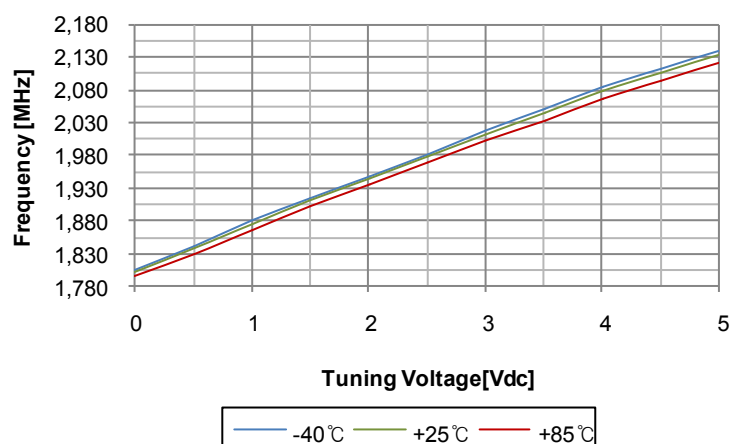


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	1930		1990
Output Power	dBm		+5.0	
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-101	
Phase Noise @100kHz offset	dBc/Hz		-122	
Tuning Voltage (Vt)	Vdc	1.3		3.5
Tuning Voltage Sensitivity (Kv)	MHz/V		33	
2nd Harmonic Suppression	dBc		-14	
Power Supply (Vcc) Voltage	Vdc		5	
Power Supply (Vcc) Current	mA		18	
Pushing Figure	MHz/V		1.3	
Pulling Figure	MHz		2	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

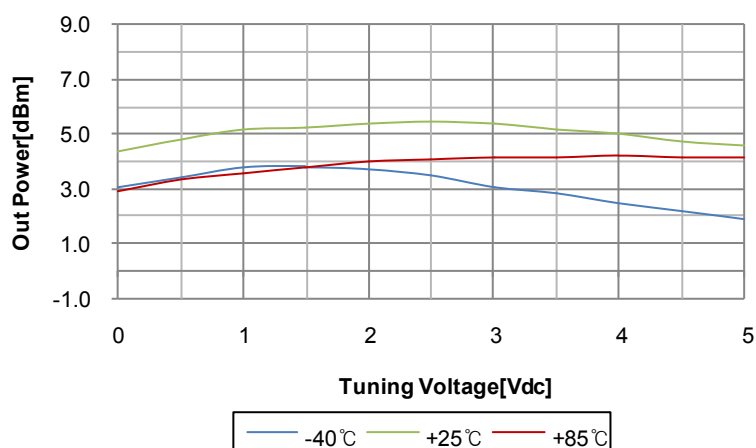
Dimensions



■ 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	1802.6	1797.1	1806.1	-	-	-	4.3	2.9	3.0	-16.6
0.5	1837.4	1829.9	1842.4	34.8	32.8	36.2	4.8	3.3	3.4	-13.8
1.0	1875.3	1866.5	1880.0	37.9	36.6	37.6	5.1	3.6	3.7	-15.1
1.5	1910.8	1901.2	1915.3	35.5	34.8	35.3	5.2	3.8	3.8	-14.6
2.0	1945.1	1934.8	1949.7	34.3	33.6	34.4	5.3	4.0	3.7	-14.5
2.5	1979.5	1968.4	1983.1	34.4	33.5	33.4	5.4	4.1	3.5	-14.3
3.0	2013.3	2001.7	2017.8	33.9	33.3	34.7	5.3	4.1	3.1	-13.6
3.5	2046.9	2034.8	2051.6	33.6	33.1	33.9	5.2	4.1	2.8	-13.3
4.0	2078.8	2066.4	2083.8	31.9	31.6	32.2	5.0	4.2	2.5	-13.1
4.5	2107.9	2095.2	2113.5	29.1	28.9	29.7	4.7	4.2	2.2	-13.1
5.0	2133.2	2120.5	2139.3	25.3	25.3	25.7	4.6	4.2	1.9	-12.8