

Voltage Controlled Oscillator

RSW102AM

Wideband 68 to 102 MHz

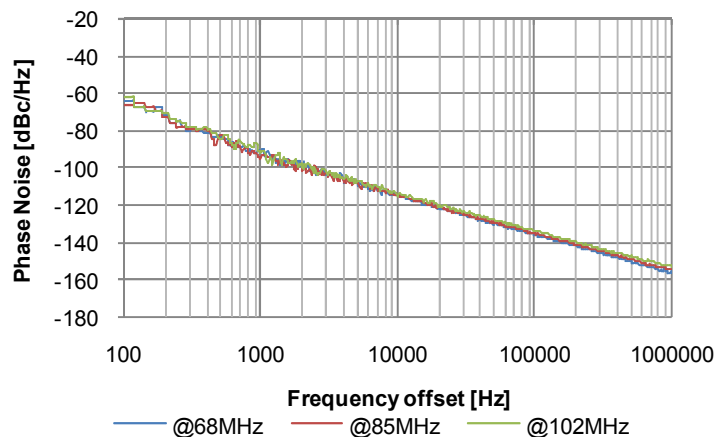
Rev. A

Features

- Low phase noise
- Linear tuning characteristics
- Low pushing / Low pulling
- Aqueous washable

Applications

- Broadcast
- VHF radio
- Wireless Telemetry
- Test Instrument - Signal Generation

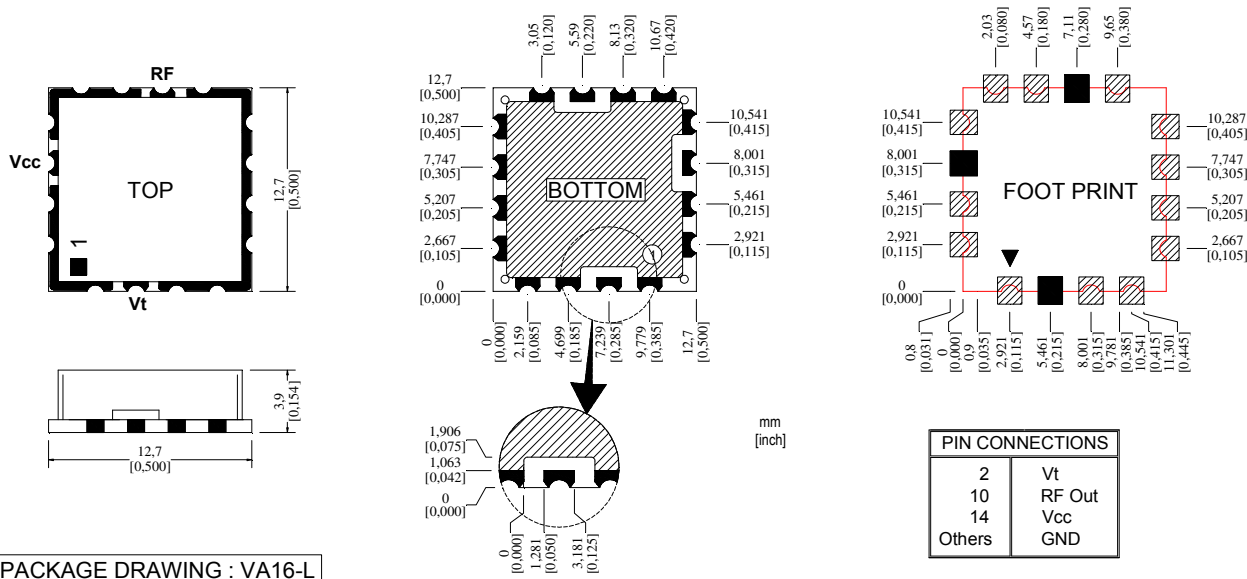


Electrical Characteristics



Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	68.00		102.00
Output Power	dBm	+7.0		+12.0
Output Impedance	Ω		50	
Phase Noise @10kHz offset	dBc/Hz		-115	-110
Phase Noise @100kHz offset	dBc/Hz		-135	-130
Tuning Voltage (Vt)	Vdc	0.5		9.5
Tuning Voltage Sensitivity (Kv)	MHz/V		2.4 - 7.2	
2nd Harmonic Suppression	dBc		-8	
Power Supply (Vcc) Voltage	Vdc		5	
Power Supply (Vcc) Current	mA		18	23
Pushing Figure	MHz/V			0.5
Pulling Figure	MHz			0.1
Input Capacitance	pF		330	
Operating Temp. Range	°C	-40		+85

Dimensions

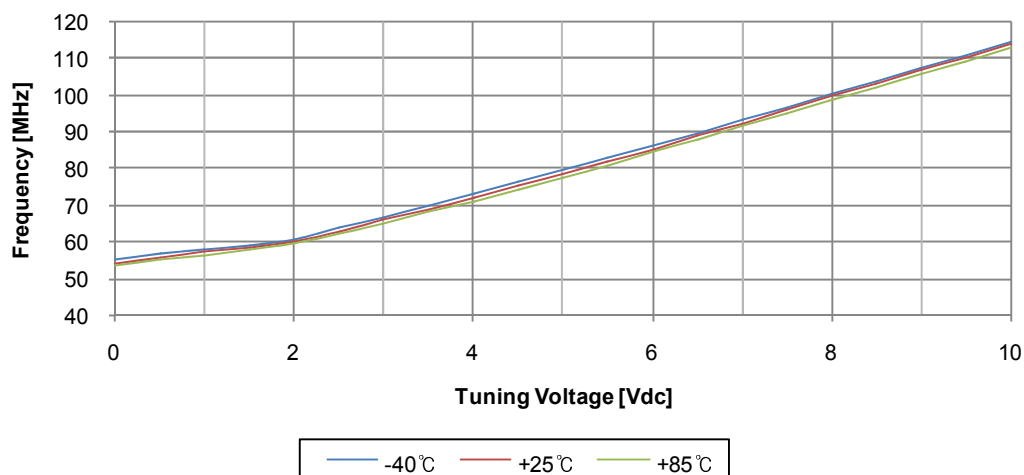


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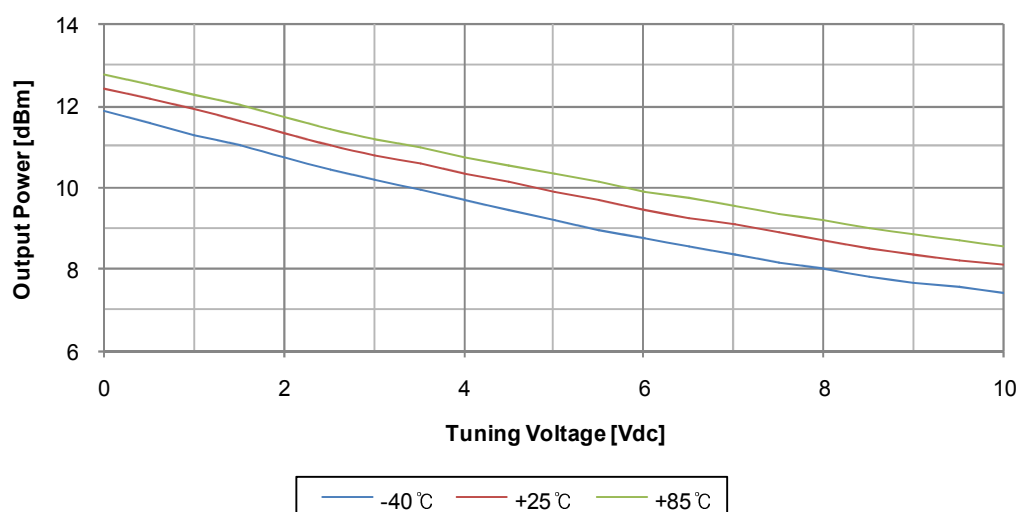
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■ Tuning Curve



■ 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	54.3	53.3	55.4	-	-	-	12.4	12.8	11.9	-5
1.0	57.2	56.4	57.8	2.9	3.1	2.4	11.9	12.3	11.3	-6
2.0	60.2	59.7	60.8	3.1	3.3	3.0	11.3	11.7	10.7	-8
3.0	65.8	65.0	66.8	5.6	5.2	6.0	10.8	11.2	10.2	-8
4.0	72.0	71.2	73.0	6.2	6.2	6.2	10.3	10.8	9.7	-9
5.0	78.6	77.6	79.4	6.6	6.5	6.5	9.9	10.3	9.2	-9
6.0	85.4	84.4	86.2	6.8	6.8	6.8	9.5	9.9	8.7	-10
7.0	92.5	91.5	93.2	7.1	7.1	7.0	9.1	9.5	8.4	-11
8.0	99.6	98.7	100.4	7.2	7.2	7.1	8.7	9.2	8.0	-12
9.0	106.8	105.9	107.5	7.1	7.2	7.1	8.4	8.8	7.7	-13
10.0	113.9	112.9	114.6	7.1	7.0	7.1	8.1	8.5	7.4	-14