

Voltage Controlled Oscillator

RSO3475AH

Ultra Low Noise 3475 to 3475 MHz

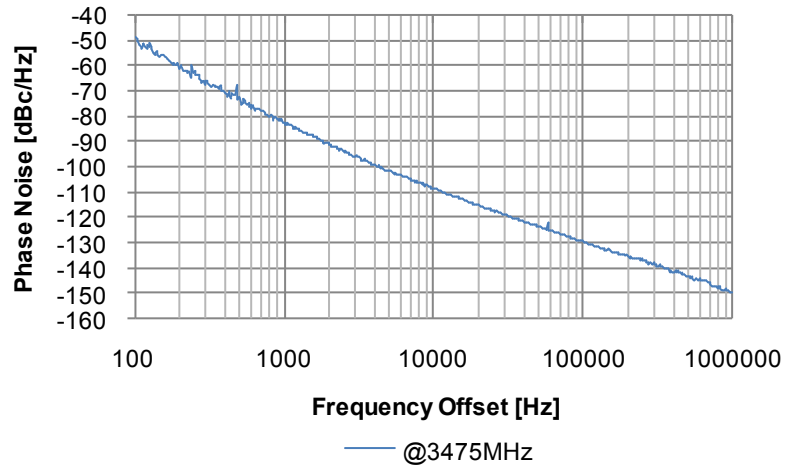
Rev. A

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

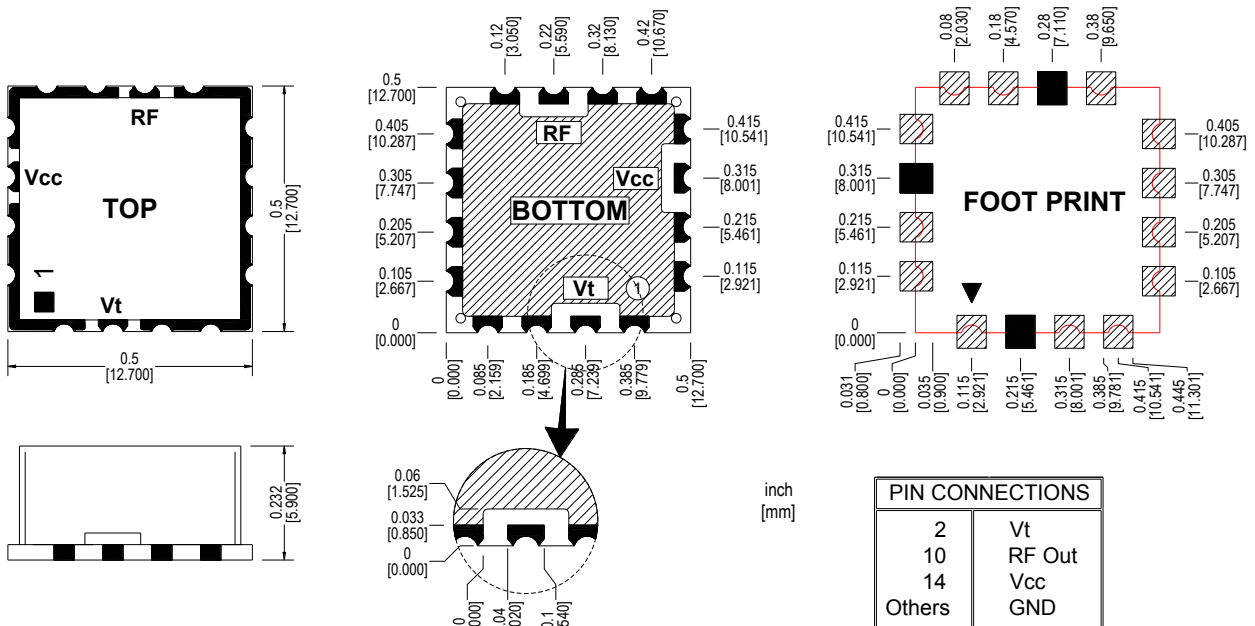


Electrical Characteristics

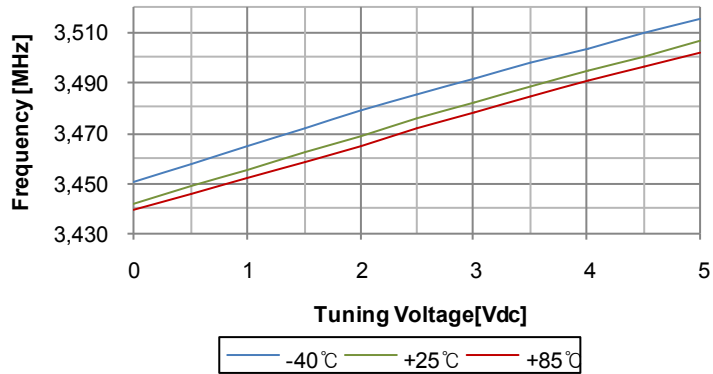


Parameter	Units	Min	Typ	Max
Operating Frequency Range	MHz	3475		3475
Output Power	dBm		3.0	
Output Impedance	Ω		50	
Phase Noise	@10kHz offset		-108	
	@100kHz offset		-128	
Tuning Voltage (Vt)	Vdc	0.5		4.5
Tuning Voltage Sensitivity (Kv)	MHz/V		13	
2nd Harmonic Suppression	dBc		-25	
Power Supply (Vcc)	Voltage		8	
	Current	mA	45	
Pushing Figure	MHz/V		0.2	
Pulling Figure	MHz		3	
Input Capacitance	pF		100	
Operating Temp. Range	$^{\circ}\text{C}$	-40		+85

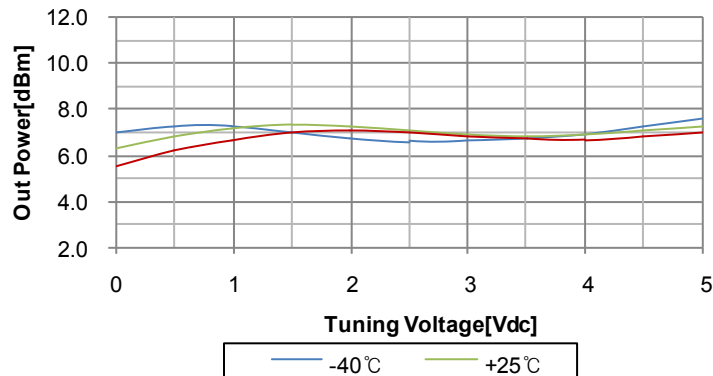
Dimensions



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	3441.3	3438.8	3450.1	-	-	-	6.3	5.5	7.0	-24.1
0.5	3448.4	3445.3	3457.5	14.2	13.1	14.8	6.8	6.2	7.3	-24.3
1.0	3455.4	3452.0	3464.6	14.0	13.3	14.2	7.2	6.7	7.3	-24.5
1.5	3462.1	3458.4	3471.9	13.3	12.8	14.5	7.4	7.0	7.0	-24.7
2.0	3468.8	3464.8	3478.8	13.4	12.9	13.8	7.3	7.1	6.7	-24.8
2.5	3475.5	3471.4	3485.4	13.4	13.1	13.2	7.1	7.0	6.6	-25.1
3.0	3482.0	3477.9	3491.7	13.1	13.1	12.7	6.9	6.8	6.6	-25.4
3.5	3488.4	3484.3	3497.8	12.7	12.8	12.2	6.8	6.7	6.7	-25.6
4.0	3494.5	3490.4	3503.8	12.2	12.3	12.0	6.9	6.7	6.9	-25.9
4.5	3500.4	3496.4	3509.7	11.9	11.9	11.8	7.0	6.8	7.2	-26.1
5.0	3506.3	3502.2	3515.6	11.8	11.6	11.8	7.3	7.0	7.6	-26.2