

# VCO-109/109TC

## Nominal Operating Parameters



Parameter	Specification			Unit	Condition
	Min	Typ	Max		
<b>General Performance</b>					
Frequency Range	900		1800	MHz	100% Production Tested
Tuning Voltage :					
900MHz	0	1.2		Vdc	100% Production Tested
1800MHz		18.5	20	Vdc	100% Production Tested
Tuning Sensitivity:					
900MHz	61.2	81.6	102	MHz/V	100% Production Tested
1125MHz	44.3	59.1	73.9	MHz/V	100% Production Tested
1350MHz	49.1	65.5	81.9	MHz/V	100% Production Tested
1575MHz	41.8	55.6	69.6	MHz/V	100% Production Tested
1800MHz	17.6	23.5	29.4	MHz/V	100% Production Tested
Output Power	10	12.5	16	dBm	100% Production Tested
Output Phase Noise:					
10kHz		-90	-84	dBc/Hz	100% Production Tested
100kHz		-112	-106	dBc/Hz	100% Production Tested
1000kHz		-135	-129	dBc/Hz	100% Production Tested
Power Supply	14.75	15	15.25	V	100% Production Tested
Supply Current		15	18	mA	100% Production Tested
Harmonic Suppression:					
2nd Harmonic		-15	-10	dBc	100% Production Tested
3rd Harmonic		-15	-10	dBc	100% Production Tested
Spurious (Non-Harmonic)			-80	dBc	
Frequency Pushing – 14.75V to 15.25V		4	6	MHz p-p	
Frequency Pulling – 20 dBRL		20	25	MHz p-p	
Output Impedance		50		$\Omega$	
Modulation:					
Bandwidth	15000	20000		kHz	
Input Impedance		0.05		k $\Omega$	

**Package:** TO-8 (Cir), 0.504 x 0.504 x 0.27 inches

**VCO-109 Temperature Range:** 0°C to 70°C

**VCO-109TC Temperature Range:** -55°C to 100°C

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