



## VCO Product Specification

**Model:** VCO-109TC      **Rev:** -      **Date:** 7/18/2002

**Customer:** VARI-L COMPANY

**Operating Temperature Range:** ( -55 ° to 100 ° C)

Parameter	Min	Typ	Max	Units	X	Remarks
Frequency Range -	900		1800	MHz	X	
Tuning Voltage:						
900 MHz	0	1.2		Vdc	X	
1800 MHz		18.5	20	Vdc	X	
Tuning Sensitivity:						
900 MHz	61.2	81.6	102	MHz/V	X	
1125 MHz	44.3	59.1	73.9	MHz/V	X	
1350 MHz	49.1	65.5	81.9	MHz/V	X	
1575 MHz	41.8	55.6	69.6	MHz/V	X	
1800 MHz	17.6	23.5	29.4	MHz/V	X	
Output Power -	10	12.5	16	dBm	X	
Output Phase Noise:						
10 kHz		-90	-84	dBc/Hz	X	
100 kHz		-112	-106	dBc/Hz	X	
1000 kHz		-135	-129	dBc/Hz	X	
Power Supply -	14.75	15	15.25	Volts	X	
Supply Current -		15	18	mA	X	
Harmonic Suppression:						
2nd Harmonic		-15	-10	dBc	X	
3rd Harmonic		-15	-10	dBc	X	
Spurious (Non-Harmonic) -			-80	dBc		
Frequency Pushing - 14.75-15.25 V		4	6	MHz p-p		
Frequency Pulling - 20 dB RL		20	25	MHz p-p		
Output Impedance -		50		Ω		
Modulation:						
Bandwidth	15000	20000		kHz		
Input Impedance		0.05		kΩ		

### Package Information

Package Type:	TO-8 (Cir)	Drawing Number:	A8678
Dimensions:	0.504 x 0.504 x 0.27 inches	Drawing Revision:	P

### Comments

X Indicates parameter to be tested 100% in production

Page 1 of 1

4895 Peoria Street Denver, CO 80239 tel: 303.371.1560 fax: 303.371.0845 sales@vari-l.com	<b>Our Products Include:</b>	PLL Synthesizer Modules	Narrow-Band Voltage Controlled Oscillators	<b>ISO 9001 Certified</b>
		Wide-Band Voltage Controlled Oscillators	Couplers	
Contact the Vari-L Sales Department for custom solutions to your RF and microwave component assembly needs.				
<b>Vari-L Company, Inc.    www.vari-l.com</b>				