



VCO Product Specification

Model: UMJ-409-D14-G **Rev:** B **Date:** 3/12/2013
Customer: RF MICRO DEVICES
Operating Temperature Range: (-40 ° to 85 ° C)

RoHS Compliant

Parameter	Min	Typ	Max	Units	X	Remarks
Frequency Range -	45		53	MHz	X	
Tuning Voltage -	1		10	Vdc	X	
Tuning Sensitivity -		2		MHz/V		
Output Power:						
	7	9	11	dBm	X	
	6			dBm		@Vt=0
Output Phase Noise:						
0.1 kHz		-80	-77	dBc/Hz		
1 kHz		-106	-103	dBc/Hz		
10 kHz		-130	-126	dBc/Hz		
100 kHz		-150	-145	dBc/Hz		
Power Supply -		5		Volts	X	
Supply Current -	12	15	20	mA	X	
Harmonic Suppression:						
2nd Harmonic		-20	-15	dBc		
Frequency Pulling -		0.1	0.3	MHz p-p		@12dBr, all phases
Tuning Port Capacitance -	300	330	360	pF		
Modulation:						
Bandwidth		100		kHz		3dB BW
Frequency Pushing (MHz/V) -		0.04	0.1	MHz/V		

Package Information

Package Type:	D14 (0.5 x 0.5 x 0.22 inches)	Drawing Number:	UP-D14
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Comments

X Indicates parameter to be tested 100% in production

Frequency Drift with Temperature: @ +85 degrees C, 0.5 MHz Typical.

Frequency Drift with Temperature: @ -40 degrees C, 0.8 MHz Typical.

RoHS status based on EU Directive 2002/95/EC (at time of this document revision).

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