PLL Product Specification

Model: PLL250-1960(Y) **Rev:** P4 **Date:** 9/1/2006

Customer: SIRENZA MICRODEVICES, INC. **AppNote:** 113 Option 107000

Operating Temperature Range: (-10 ° to 85 ° C)

RoHS Compliant

To order models as RoHS Compliant add "Y" suffix to base model number.

Parameter	Min	Typ	Max	Units	X	Remarks
Frequency Range -	1930		1990	MHz	X	
Step Size -		200		kHz	X	
Settling Time - to within 5 deg.		0.4	0.45	mSec		
Output Power:						
RF Switch ON	-8	-5	-2	dBm	X	
RF Switch OFF		-50	-48	dBm	X	
Output Phase Noise:						
1 kHz		-82	-79	dBc/Hz		
100 kHz		-118	-110	dBc/Hz		
200 kHz		-126	-120	dBc/Hz		
400 kHz		-135	-129	dBc/Hz	X	
1800 kHz		-146	-143	dBc/Hz		
6000 kHz		-155	-152	dBc/Hz		
Power Supply:						
VCC 1: VCO, PLL CP	5.75	6	6.25	Volts	X	
VCC 2: Amp	4.75	5	5.25	Volts	X	
VCC 3: PLL IC,Switch	3.15	3.3	3.45	Volts	X	
Supply Current:						
VCC 1		14	40	mA	X	
VCC 2		48	80	mA		
VCC 3		10	15	mA		
Spurious Product:						
200 kHz		-82	-73	dBc	X	
400 kHz		-98	-85	dBc		
1800 kHz		-115	-100	dBc		
non-harmonic			-100	dBc		
Reference Feedthrough -		-100	-95	dBc		
Harmonic Suppression:						
2nd Harmonic		-31	-25	dBc	X	
3rd Harmonic		-35	-30	dBc	X	
Ref Osc Signal:						
Frequency		52		MHz		

Parameter	Min	Typ	Max	Units	X	Remarks
Amplitude	0.75	1	1.25	Vp-p		
Input Impedance		100		kΩ		
Output Impedance -		50		Ω		
Output VSWR -		1.7:1				

Package Information

Package Type:	PLL250 (1 x 1 x 0.252 inches)	Drawing Number:	61070

Comments

X Indicates parameter to be tested 100% in production

Switching Phase Error: By Design: < 50 us, 2 deg. typical - 5 deg. max.; > 50 us, 1 deg. max

Max Phase Noise Peaking = 5 dBc/Hz, By Design

Pin 19 decoupled with RCR Low-Pass filter

All Power Supplies decoupled with LCL-Low-Pass filter

All programming lines decoupled with RCR Low-Pass fiter

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