

SELECTABLE FREQUENCY SYNTHESIZER

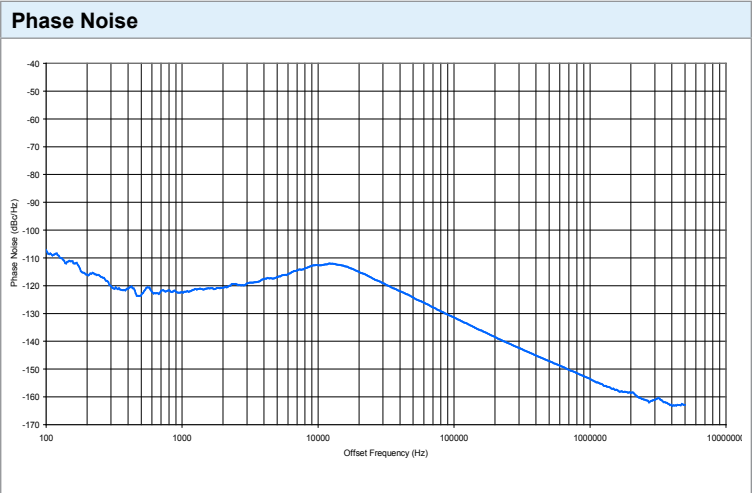
SURFACE MOUNT MODEL: FCPL-70

OPTIMIZED LOOP PARAMETERS

65 - 72 MHz

FEATURES:

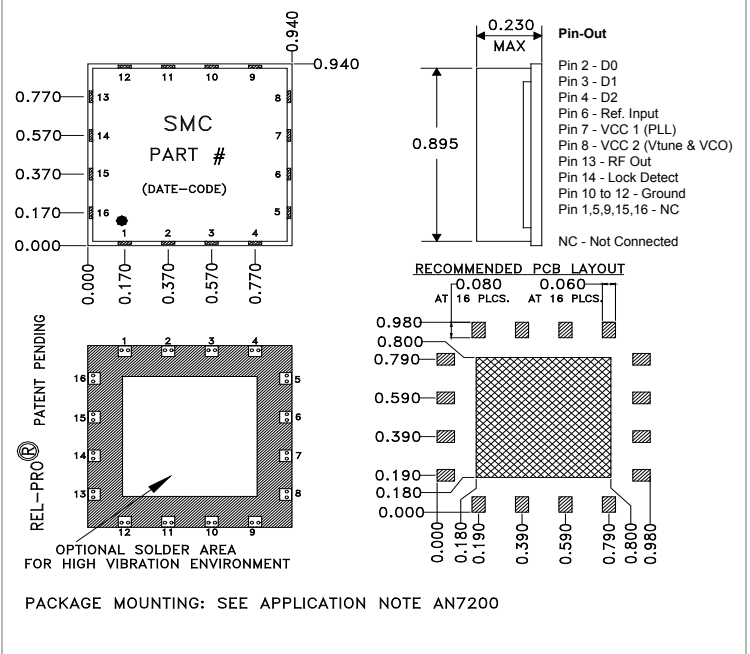
- ▶ Exceptionally Low Phase Noise
- ▶ No Programming Required
- ▶ Lead Free - RoHS Compliant
- ▶ Patent Pending REL-PRO® Technology
- ▶ Small Size, Surface Mount



SPECIFICATIONS (Rev. B 05/30/08)

Frequency	65 - 72 MHz		
Step Size	1 MHz		
Reference Input Frequency	10 MHz		
Reference Input Voltage	1 V p-p to 3.5 V p-p		
Bias Voltage	Vcc	V (Vdc)	I (mA Max.)
	PLL	+5	15
	VCO	+5	35
	Vtune	+5	35
	D0, D1, D2	0 V / +5V	
Output Power	+3 dBm ±2dB		
Spurious & Ref. Sideband	80 dB (Typ.)		
Harmonic Suppression	12 dB (Typ.)		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 1 kHz	-120 dBc/Hz	
	@ 10 kHz	-112 dBc/Hz	
	@ 100 kHz	-131 dBc/Hz	
Operating Temperature Range	-40 to +85 °C		

Package # 273LF



Binary Frequency Selection			
D2	D1	D0	Frequency (MHz)
0	0	0	65
0	0	1	66
0	1	0	67
0	1	1	68
1	0	0	69
1	1	1	70
1	0	1	71
1	1	0	72

This product is manufactured under one or more of the following patents: Approved: 5,183,810; 5,122,621; 5,390,346; 5,416,446; 5,630,754; 5,805,431; 6,325,623; 6,856,573; 7,088,189; 7,180,381; 7,185,591; 7,282,670; 7,283,642; 7,292,113
 Pending: 65/48,307; 65/50,137; 65/50,179; 65/52,937; 65/53,675; 65/56,481; 65/56,417; 65/58,083; 65/60,822; 65/60,579; 65/31,383/04;
 65/29,768; 65/62,485 & 65/71,031; 65/67,325/60/73/69/1; 65/73,273

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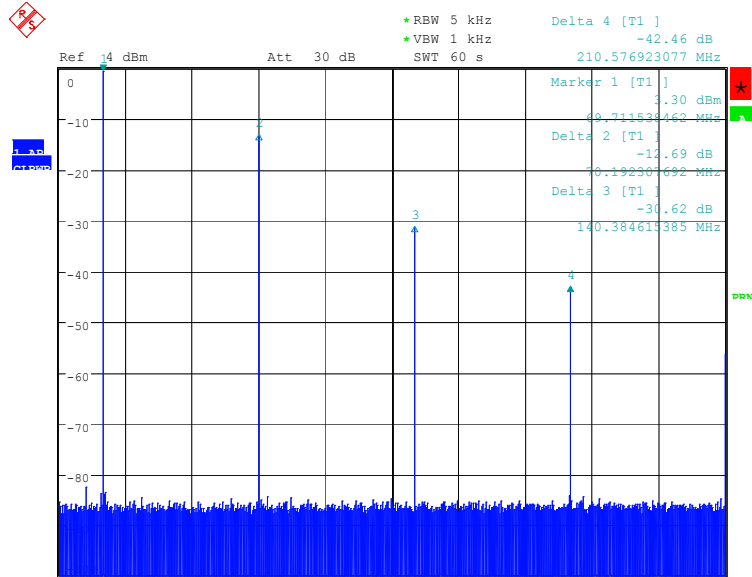
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SURFACE MOUNT MODEL: FCPL-70

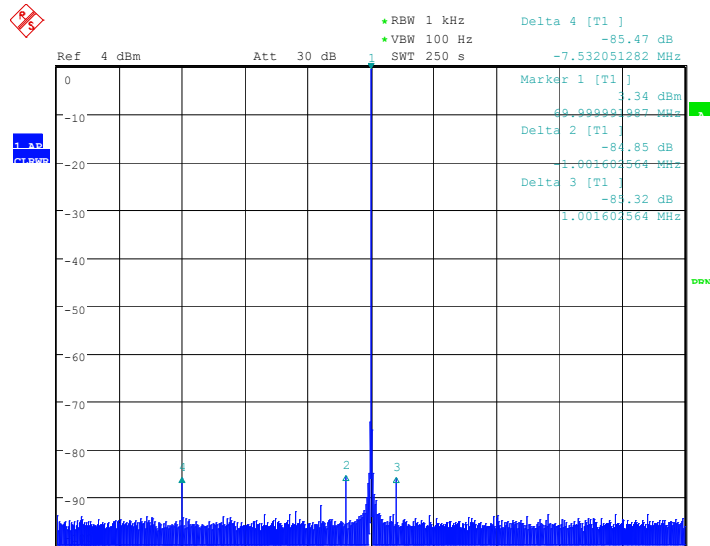
OPTIMIZED LOOP PARAMETERS

65 - 72 MHz

HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS

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Pending: 66/48,307; 60/50,1371 & 66/50,1796; 60/52,7937 & 66/53,8675; 60/56,3481; 60/56,4173; 60/58,0083; 60/60,1822; 60/60,5791; EV31268034;
RU258768; 60/62,2485 & 66/710319; RU60732560736901; 60/732787

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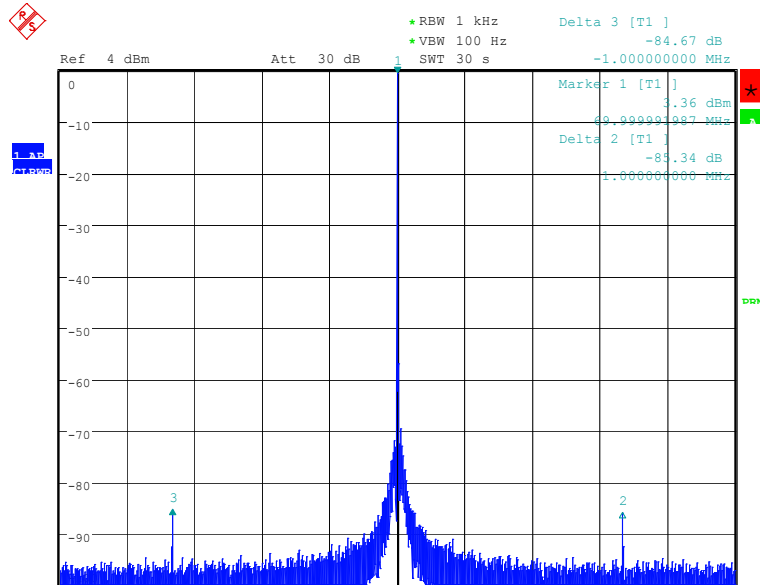
SELECTABLE FREQUENCY SYNTHESIZER

SURFACE MOUNT MODEL: FCPL-70

OPTIMIZED LOOP PARAMETERS

65 - 72 MHz

CLOSE IN SPURIOUS SUPPRESSION



PERFORMANCE PLOTS

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 Pending: 66/48,307; 60/501,371 & 66/561,796; 60/527,957 & 66/538,675; 60/563,481; 60/564,173; 60/580,083; 60/601,822; 60/605,791; EV31268034;
 RU258768; 60/622,485 & 66/710,212; RU60732560/736901; 60/732787

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