Engineering Development Model

Frequency Synthesizer KSN-EDR8066

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : DK801

ELECTRICAL SPECIFICATIONS 50Ω, over -45°C to +85°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		409		415	MHz
Step size			20		kHz
Settling Time	**Within ±1kHz**		5		msec
Output Power		-4	0	+4	dBm
Phase Noise					
	at 100 Hz offset		-78		dBc/Hz
	at 1 kHz offset		-79		dBc/Hz
	at 10 KHz offset		-111	-106	dBc/Hz
	at 100 KHz offset		-140	-134	dBc/Hz
	at 1000 kHz offset		-159		dBc/Hz
Integrated SSB Phase Noise			-44		dBc
Reference Spurious Suppression			-102		dBc
Comparison Spurious Suppression			-112		dBc
Non-Harm. Spurious Suppression			-90		dBc
Harmonic Suppression			-19		dBc
Supply voltage	**VCO**		5		V
	PLL		5		V
Supply current	**VCO**		19	27	mA
	PLL		13	21	mA
Reference In (External)	**Frequency**		10		MHz
	Amplitude		1		Vp-p
	Impedance		100		kΩ
	Ph. N @ 1kHz		-145		dBc/Hz
Input Logic Levels	**Logic high**	4		5	V
	Logic Low			1	
Digital Lock Detect	**Locked**	4.6		5	V
	Unlocked			0.4	
Frequency Synthesizer PLL		ADF4118			

ABSOLUTE MAXIMUM RATINGS	
Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
VCO Supply Voltage	6V
PLL Supply Voltage	6V
Reference Frequency voltage	5.8Vp-p
Data, Clock & LE levels	5.3V

Power On sequence: Vcc VCO followed by Vcc PLL
Power Off sequence: Vcc PLL followed by Vcc VCO

PIN CONNECTIONS			
RF OUT	7	**CLOCK**	10
VCC VCO	5	**DATA**	11
VCC PLL	1	**LATCH ENABLE**	12
REF IN	3	**GROUND**	2,4,6,8,13,14
LOCK DETECT	9		

Notes
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp