

Engineering Development Model

Frequency Synthesizer

KSN-EDR10835SA

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.



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CASE STYLE : DK1042

ELECTRICAL SPECIFICATIONS 50Ω, over -15°C to +75°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	870		910	MHz
Step size		10000		kHz
Settling Time	Within ±1kHz	307		μsec
Output Power	-1	+3	+7	dBm
Phase Noise				
at 100 Hz offset		-96		dBc/Hz
at 1 kHz offset		-108		dBc/Hz
at 10 KHz offset		-108		dBc/Hz
at 100 KHz offset		-126		dBc/Hz
at 1000 KHz offset		-154		dBc/Hz
Integrated SSB Phase Noise		-61		dBc
Ref & Comp Spurious Suppression		-80		dBc
Non-Harm. Spurious Suppression		-90		dBc
Harmonic Suppression		-30	-22	dBc
Supply voltage	VCO	5		V
	PLL	3.3		V
Supply current	VCO	42	51	V
	PLL	10	18	V
Reference In	Frequency	10		MHz
(External)	Amplitude	1		Vp-p
	Impedance	100		kΩ
	Ph. N @ 1kHz	-145		dBc/Hz
Input Logic	Logic high	1.4	3.3	V
Levels	Logic Low		0.6	V
Digital Lock	Locked	2.9	3.3	V
Detect	Unlocked		0.4	V
Frequency Synthesizer PLL		ADF4106		

ABSOLUTE MAXIMUM RATINGS	
Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
VCO Supply Voltage	6V
PLL Supply Voltage	4.3V
Reference Frequency voltage	3.6Vp-p
Data, Clock & LE levels	3.6V

Power On sequence: Vcc VCO followed by Vcc PLL

Power Off sequence: Vcc PLL followed by Vcc VCO

PIN CONNECTIONS			
RF OUT	3	CLOCK	10
VCC VCO	5	DATA	11
VCC PLL	1	LATCH ENABLE	12
REF IN	7	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/MCStore/terms.jsp

