

Engineering Development Model

Frequency Synthesizer

KSN-EDR10968

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 : DK1042

ELECTRICAL SPECIFICATIONS 50Ω, over -55°C to +85°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	4803.9		4863.6	MHz
Step size		100		kHz
Settling Time Within ±1kHz		4		msec
Output Power	-8	-4	0	dBm
Phase Noise				
at 100 Hz offset		-74		dBc/Hz
at 1 kHz offset		-82		dBc/Hz
at 10 KHz offset		-90	-84	dBc/Hz
at 100 KHz offset		-114		dBc/Hz
at 1000 kHz offset		-134	-128	dBc/Hz
Integrated SSB Phase Noise		-42		dBc
Reference Spurious Suppression		-91		dBc
Comparison Spurious Suppression		-81		dBc
0.5 Step size Spurious Suppression		-94		dBc
Non-Harm. Spurious Suppression		-90		dBc
Harmonic Suppression		-32		dBc
Supply voltage		5		V
VCO		3.3		V
Supply current		52	61	V
PLL		23	32	V
Reference In (External)				
Frequency		100		MHz
Amplitude		1		Vp-p
Impedance		100		kΩ
Ph. N @ 1kHz		-145		dBc/Hz
Input Logic Levels				
Logic high	1.4		3.3	V
Logic Low			0.6	V
Digital Lock Detect				
Locked	2.9		3.3	V
Unlocked			0.4	V
Frequency Synthesizer PLL		ADF4156		

ABSOLUTE MAXIMUM RATINGS	
Operating Temperature	-55°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	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/MCStore/terms.jsp

