

Engineering Development Model

Frequency Synthesizer

DSN-EDR9520

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 : KL942

ELECTRICAL SPECIFICATIONS 50Ω, over -45°C to +85°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	870		1300	MHz
Step size		5000		kHz
Settling Time Within ±1kHz		12		μsec
Output Power	-3	+1	+5	dBm
Phase Noise				
at 100 Hz offset		-93		dBc/Hz
at 1 kHz offset		-103	-97	dBc/Hz
at 10 kHz offset		-104	-98	dBc/Hz
at 100 kHz offset		-103	-97	dBc/Hz
at 1000 kHz offset		-125		dBc/Hz
Integrated SSB Phase Noise		-47		dBc
Comparison Spurious Suppression		-94		dBc
Non-Harm. Spurious Suppression		-90		dBc
Harmonic Suppression		-32		dBc
Supply voltage				
VCO		5		V
PLL		5		V
Supply current				
VCO		42	50	mA
PLL		10	18	mA
Reference In (External)				
Frequency		50		MHz
Amplitude		1		Vp-p
Impedance		100		kΩ
Ph. N @ 1kHz		-145		dBc/Hz
Input Logic Levels				
Logic high	1.4		3.2	V
Logic Low			0.6	V
Digital Lock Detect				
Locked	2.8		3.2	V
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	6V
Reference Frequency voltage	3.6Vp-p
Data, Clock & LE levels	3.5V

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

PIN CONNECTIONS			
RF OUT	5	CLOCK	14
VCC VCO	16	DATA	16
VCC PLL	18	LATCH ENABLE	18
REF IN	14	GROUND	1-4,6,8,10,13, 15,17,19-22
LOCK DETECT	7		

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



www.minicircuits.com P.O. Box 350168, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. OR
DSN-EDR9520
150226