

Engineering Development Model

Frequency Synthesizer

DSN-EDR9822

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 : KL1294

ELECTRICAL SPECIFICATIONS 50Ω, over -25°C to +65°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	950		2000	MHz
Step size		0.1		kHz
Settling Time Within ±1kHz		8		msec
Output Power	-2	+3	+7	dBm
Phase Noise				
at 100 Hz offset		-76		dBc/Hz
at 1 kHz offset		-85		dBc/Hz
at 10 kHz offset		-89		dBc/Hz
at 100 kHz offset		-107		dBc/Hz
at 1000 kHz offset		-128		dBc/Hz
Integrated SSB Phase Noise		-41		dBc
Ref & Comp Spurious Suppression		-117		dBc
0.5 Step size Spurious Suppression		-72		dBc
Non-Harm. Spurious Suppression		-90		dBc
Harmonic Suppression		-23		dBc
Supply voltage VCO		15		V
Supply voltage PLL		5		V
Supply current VCO		19	27	mA
Supply current PLL		35	44	mA
Reference In Frequency		10		MHz
Reference In Amplitude		1		Vp-p
Reference In Impedance		100		kΩ
Reference In Ph. N @ 1kHz		-145		dBc/Hz
Input Logic Logic high	2.4		3	V
Levels Logic Low			0.9	V
Digital Lock Locked	2.8		3	V
Detect Unlocked			0.2	V
Frequency Synthesizer PLL	SKY723QF			

ABSOLUTE MAXIMUM RATINGS	
Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
VCO Supply Voltage	16V
PLL Supply Voltage	6V
Reference Frequency voltage	3.6Vp-p
Data, Clock & LE levels	3.3V

Power On sequence: Vcc VCO followed by Vcc PLL

Power Off sequence: Vcc PLL followed by Vcc VCO

PIN CONNECTIONS			
RF OUT	5	CLOCK	11
VCC PLL	16	DATA	9
VCC VCO	18	LATCH ENABLE	12
REF IN	14	GROUND	1-4,6,10,13, 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

