

## Engineering Development Model

### Frequency Synthesizer

### ZSN-EDR10835

#### 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.



CASE STYLE : KG1714

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ELECTRICAL SPECIFICATIONS 50Ω, over -10°C to +70°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	890		890	MHz
Step size		10000		kHz
Settling Time Within ±1kHz		1.5		msec
Output Power	+6	+10	+13	dBm
Phase Noise				
at 100 Hz offset		-99		dBc/Hz
at 1 kHz offset		-107	-101	dBc/Hz
at 10 KHz offset		-105	-99	dBc/Hz
at 100 KHz offset		-126	-120	dBc/Hz
at 1000 kHz offset		-155	-149	dBc/Hz
Integrated SSB Phase Noise		-59		dBc
Ref & Comp Spurious Suppression		-90		dBc
Non-Harm. Spurious Suppression		-90		dBc
Harmonic Suppression		-59		dBc
Supply voltage VCO & PLL		12		V
Supply current VCO & PLL		153	162	V
Reference In (External)				
Frequency		10		MHz
Amplitude		1		Vp-p
Impedance		100		kΩ
Ph. N @ 1kHz		-145		dBc/Hz
Digital Lock Detect	Locked	2.9	3.3	V
	Unlocked		0.4	
Frequency Synthesizer PLL	Self-programmed (internal microcontroller)			

ABSOLUTE MAXIMUM RATINGS	
Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Supply Voltage	13V
Reference Frequency voltage	3.6Vp-p

CONNECTIONS	
RF OUT	SMA (Female)
REF IN	SMA (Female)
VCC	Turret Terminal
LOCK DETECT	Turret Terminal

#### 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.  
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