

UMZ-986-D16-G

MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

Package: D16, 12.7 mm x 12.7 mm x 5.6 mm

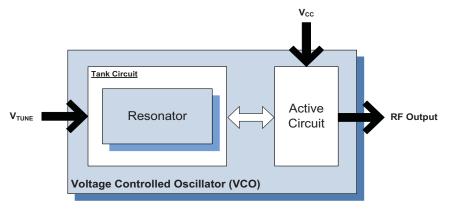


Features

- Ultra-Linear Tuning/Low Phase Noise
- Frequency: 3000 MHz to 3500 MHz
- Resonator: Microstrip
- PCB: Rogers
- Package Size: 12.7 mm x 12.7 mm x 5.6 mm (0.5 in x 0.5 in x 0.22 in)

Applications

- Frequency Synthesizers
- Up and Down Converters
- Instrumentation
- Wideband Frequency Applications



Functional Block Diagram

Product Description

This series of VCO modules offers ultra-linear tuning across their specified frequency band.

Ordering Information

UMZ-986-D16-G Contact us at 1-480-756-6070

Optimum Technology Matching® Applied

🗌 GaAs HBT	□ SiGe BiCMOS	🗌 GaAs pHEMT
GaAs MESFET	🗌 Si BiCMOS	□_Si CMOS
🗌 InGaP HBT	SiGe HBT	Si BJT

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GaN HEMT BiFET HBT LDMOS

UMZ-986-D16-G



Absolute Maximum Ratings

0		
Parameter	Rating	Unit
Operating Ambient Temperature[1]	-40 to +85	°C
Storage Temperature	-55 to +125	°C

[1] Frequency drift: 20MHz typical, 25MHz maximum (either extreme)



Caution! ESD sensitive device.

Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

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RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

Parameter		Specification		Unit	Ocadition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	3000		3500	MHz	
Tuning Voltage	2		12	V _{DC}	
Tuning Sensitivity		60		MHz/V	
Output Power	-2	0	2	dBm	
	-2			dBm	At V _T =0
Output Phase Noise		-71	-66	dBc/Hz	1kHz
		-98	-93	dBc/Hz	10kHz
		-119	-114	dBc/Hz	100 kHz
		-139	-134	dBc/Hz	1000 kHz
		-159	-154	dBc/Hz	10000kHz
Second Harmonic		-15	-10	dBc	
Frequency Pulling		2	4	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		20		pF	
Modulation Bandwidth		5000		kHz	3dB BW
Frequency Pushing		2	4	MHz/V	
Power Supply					
Operating Voltage		8		V	
Supply Current		28		mA	





Package Drawing & Pin Outs

12.7 mm x 12.7 mm x 5.6 mm (0.5 in x 0.5 in x 0.22 in)

