

# UMZ-985-D16-G

#### MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

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

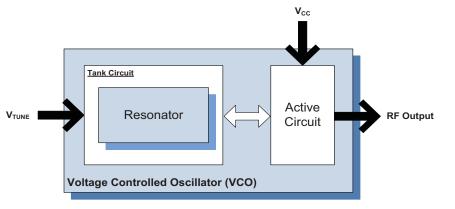


### Features

- Ultra-Linear Tuning/Low Phase Noise
- Frequency: 2500 MHz to 3000 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-985-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 ☑ Si BJT
🗌 InGaP HBT	SiGe HBT	🗹 Si BJT

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GaN HEMT BiFET HBT LDMOS

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#### **Absolute Maximum Ratings**

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

[1] Frequency drift: 12MHz typical, 18MHz 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		11	
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	2500		3000	MHz	
Tuning Voltage	2		12	V <sub>DC</sub>	
Tuning Sensitivity		56		MHz/V	
Output Power	-2	0	2	dBm	
	-2			dBm	At V <sub>T</sub> =0
Output Phase Noise		-71	-66	dBc/Hz	1kHz
		-99	-94	dBc/Hz	10kHz
		-120	-115	dBc/Hz	100 kHz
		-140	-135	dBc/Hz	1000kHz
		-160	-155	dBc/Hz	10000kHz
Second Harmonic		-15	-10	dBc	
Frequency Pulling		1.5	3	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		20		pF	
Modulation Bandwidth		5000		kHz	3db BW
Frequency Pushing		1.5	3	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)

