

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









## UMZ-985-D16-G

# MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

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

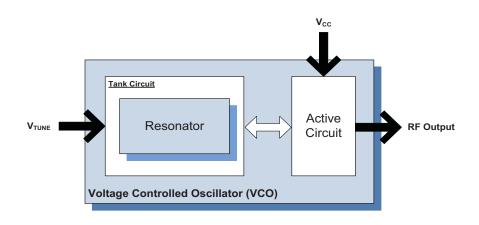


#### **Features**

- 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	☐ GaN HEM
GaAs MESFET	☐ Si BiCMOS	□ Si CMOS	☐ BiFET HBT
☐ InGaP HBT	☐ SiGe HBT	<b>▼</b> Si BJT	☐ LDMOS

## UMZ-985-D16-G



#### **Absolute Maximum Ratings**

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

<sup>[1]</sup> 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		Heit	Condition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	2500		3000	MHz	
Tuning Voltage	2		12	$V_{DC}$	
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	100kHz
		-140	-135	dBc/Hz	1000 kHz
		-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)

