

# UMZ-575-D16-G

# MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

Package: D16, 12.7mm x 12.7mm x 5.59mm

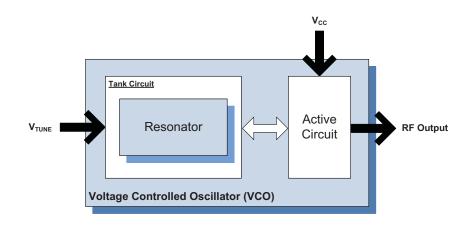


#### **Features**

- Ultra-Linear Tuning/Low Phase Noise
- Frequency: 800Hz to 950Hz
- Resonator: Microstrip
- PCB: Rogers
- Package Size: 12.7mm x 12.7mm x 5.59mm (0.5in x 0.5in x 0.22in)

#### **Applications**

- Frequency Synthesizers
- Up & 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-575-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

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#### **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: 6MHz typical (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	Condition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	800		950	MHz	
Tuning Voltage	1		15	V <sub>DC</sub>	
Tuning Sensitivity		18		MHz/V	
Output Power	-2	0	2	dBm	
	-3			dBm	At V <sub>T</sub> =0
Output Phase Noise		-89	-84	dBc/Hz	1kHz
		-114	-109	dBc/Hz	10kHz
		-134	-129	dBc/Hz	100kHz
		-154	-149	dBc/Hz	1000 kHz
		-164	-155	dBc/Hz	10000kHz
Second Harmonic		-20	-10	dBc	
Frequency Pulling		1	3	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		47		pF	
Modulation Bandwidth		1000		kHz	3dB BW
Frequency Pushing		1	2	MHz/V	
Power Supply					
Operating Voltage		5		V	
Supply Current		26		mA	



## **Package Drawing & Pin Outs**

12.7mm x 12.7mm x 5.59mm (0.5in x 0.5in x 0.22in)

