

## UMX-1035-D16-G

# ULTRA-LOW NOISE COAXIAL RESONATOR OSCILLATOR

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

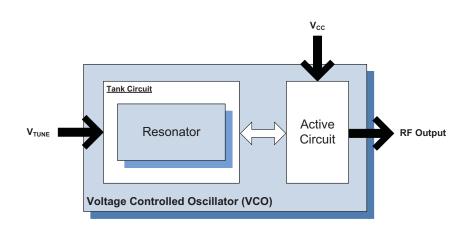


#### **Features**

- Ultra-linear Tuning/Ultra-low Phase Noise
- Frequency: 1045MHz to 1055MHz
- Resonator: Ceramic
- PCB: Rogers
- Package Size: 12.7mm x 12.7mm x 5.59mm (0.5in x 0.5in x 0.22in)

### **Applications**

- Point-to-Point Radio
- DRO/YIG Multiplied Replacements
- Low Phase Noise Applications
- SAW VCO Replacements



**Functional Block Diagram** 

### **Product Description**

This VCO series features ultra-low phase noise, lower phase transients, lower harmonics, and lower pushing and pulling without any performance penalties typically associated with high technology designs.

#### **Ordering Information**

UMX-1035-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: 1.5MHz typical (either extreme)



#### Caution! ESD sensitive device.

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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	1045		1055	MHz	
Tuning Voltage	1		11	V <sub>DC</sub>	
Tuning Sensitivity		3		MHz/V	
Output Power	2	4	6	dBm	
	2				At V <sub>T</sub> = 0
Output Phase Noise		-100	-95	dBc/Hz	1kHz
		-125	-120	dBc/Hz	10kHz
		-145	-140	dBc/Hz	100kHz
		-160	-155	dBc/Hz	1000 kHz
		-160	-155	dBc/Hz	10000kHz
Second Harmonic		-13	-10	dBc	
Frequency Pulling			0.1	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		10		pF	
Modulation Bandwidth		1000		kHz	3dB BW
Frequency Pushing		0.1	0.3	MHz/V	
Power Supply					
Operating Voltage		5		V	
Supply Current		42		mA	

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## **Package Drawing & Pin Outs**

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

