

UMV-1050-R16-G

ULTRA-LINEAR TUNING VOLTAGE CONTROLLED OSCILLATOR

Package: R16, 12.7mm x 12.7mm x 4.57mm

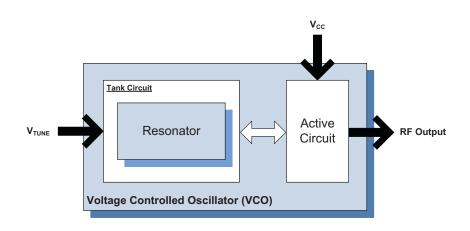


Features

- Linear Tuning/100MHz Frequency
- Frequency: 1000MHz to 1100MHz
- Resonator: Microstrip
- PCB: Rogers
- Package Size: 12.7mm x 12.7mm x 4.57mm (0.5in x 0.5in x 0.18in)

Applications

- Frequency Sythesizers
- Upconverters and Downconverters
- Narrow V_{TUNE} and V_{CC} Applications



Functional Block Diagram

Product Description

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

Ordering Information

UMV-1050-R16-G Contact us at 1-480-756-6070

Optimum Technology Matching® Applied

☐ GaAs HBT	☐ SiGe BiCMOS	☐ GaAs pHEMT	☐ GaN HEMT
☐ GaAs MESFET	☐ Si BiCMOS	□ Si CMOS	☐ BiFET HBT
☐ InGaP HBT	☐ SiGe HBT	▼ 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

[1] Frequency drift: 5MHz typical, 10MHz maximum (either extreme)



Caution! ESD sensitive device.

CAUTINITIES OF SETISITIVE 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		l lucit	Condition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	1000		1100	MHz	
Tuning Voltage	0.5		4.5	V_{DC}	
Tuning Sensitivity		36		MHz/V	
Output Power	-2.5	0	2.5	dBm	
	-3				At V _T = 0
Output Phase Noise		-85	-80	dBc/Hz	1kHz
		-110	-105	dBc/Hz	10kHz
		-130	-125	dBc/Hz	100 kHz
		-150	-145	dBc/Hz	1000 kHz
		-164	-155	dBc/Hz	10000kHz
Second Harmonic		-15	-10	dBc	
Frequency Pulling		0.5	1	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		25		mA	

RFMD [10]



Package Drawing & Pin Outs

12.7mm x 12.7mm x 4.57mm (0.5in x 0.5in x 0.18in)

