

UMS-2000-A16-G

OCTAVE BAND VOLTAGE CONTROLLED OSCILLATOR

Package: A16, 12.7mm x 12.7mm x 3.43mm

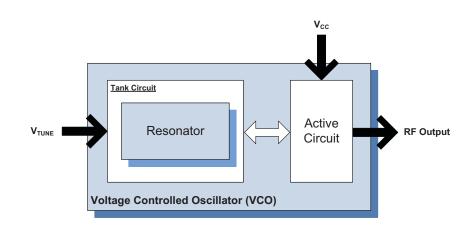


Features

- Octave Band Tuning
- Frequency: 1000MHz to 2000MHz
- Resonator: Microstrip
- PCB: Rogers
- Package Size: 12.7mm x 12.7mm x 3.43mm (0.5in x 0.5in x 0.135in)

Applications

- Wide Band Applications
- Built-in Test Applications
- First LO Applications
- Frequency Sythesizers



Functional Block Diagram

Product Description

This series of VCO modules features full octave bands (typical), low phase noise, low harmonics, and linear tuning.

Ordering Information

UMS-2000-A16-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	▼ 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: 10.0MHz 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		Heit	Condition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	1000		2000	MHz	
Tuning Voltage	1		14	V_{DC}	
Tuning Sensitivity		85		MHz/V	
Output Power	8.5	11	13.5	dBm	
	8.5			dBm	At V _T =0
Output Phase Noise		-78	-72	dBc/Hz	1kHz
		-103	-97	dBc/Hz	10kHz
		-123	-117	dBc/Hz	100 kHz
		-143	-137	dBc/Hz	1000 kHz
		-164	-155	dBc/Hz	10000 kHz
Second Harmonic		-20	-10	dBc	
Frequency Pulling		10	20	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		47		pF	
Modulation Bandwidth		10000		kHz	3dB BW
Frequency Pushing		0.5	1.5	MHz/V	
Power Supply					
Operating Voltage		12		V	
Supply Current		30		mA	

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Package Drawing & Pin Outs

12.7mm x 12.7mm x 3.43mm (0.5in x 0.5in x 0.135in)

