

UMZ-822-D16-G

MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

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

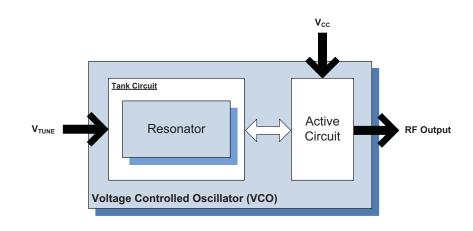


Features

- Ultra-Linear Tuning/Low Phase Noise
- Frequency: 4600MHz to 5300MHz
- 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-822-D16-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

RF MICRO DEVICES®, RFMD®, Optimum Technology Matching®, Enabling Wireless Connectivity™, PowerStar®, POLARIS™ TOTAL RADIO™ and UltimateBlue™ are trademarks of RFMD, LLC. BLUETOOTH is a trade mark owned by Bluetooth SIG, Inc., U.S.A. and licensed for use by RFMD. All other trade names, trademarks and registered trademarks are the property of their respective owners. ©2006, RF Micro Devices, Inc.

UMZ-822-D16-G



Absolute Maximum Ratings

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

^[1] Frequency drift: 22MHz 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.

The information in this publication is believed to be accurate and reliable. However, no responsibility is assumed by RF Micro Devices, Inc. ("RFMD") for its use, nor for any infringement of patents, or other rights of third parties, resulting from its use. No license is granted by implication or otherwise under any patent or patent rights of RFMD. RFMD reserves the right to change component circuitry, recommended application circuitry and specifications at any time without prior notice.



RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

Parameter		Specification		l lusit	Condition
	Min.	Тур.	Max.	Unit	Condition
Overall					
Frequency Range	4600		5300	MHz	
Tuning Voltage	0.2		8	V _{DC}	
Tuning Sensitivity		125		MHz/V	
Output Power	-3	0	3	dBm	
	-3			dBm	At V _T =0
Output Phase Noise		-63	-58	dBc/Hz	1kHz
		-89	-84	dBc/Hz	10kHz
		-109	-104	dBc/Hz	100kHz
		-149	-144	dBc/Hz	1000 kHz
Second Harmonic		-20	-10	dBc	
Frequency Pulling		3	6	MHz p-p	At 12dBr, all phases
Tuning Port Capacitance		10		pF	
Modulation Bandwidth		1000		kHz	3dB BW
Frequency Pushing		3	6	MHz/V	
Power Supply					
Operating Voltage		5		V	
Supply Current		27		mA	



Package Drawing & Pin Outs

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

