

UMZ-1197-D16-G

MICROSTRIP VOLTAGE CONTROLLED OSCILLATOR

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

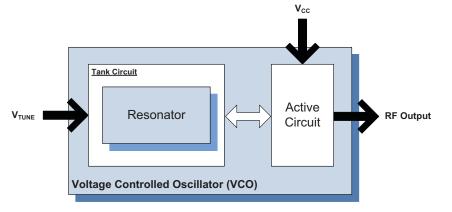


Features

- Ultra-Linear Tuning/Low Phase Noise
- Frequency: 4130MHz to 4730MHz
- 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-1197-D16-G Contact us at 1-480-756-6070

Optimum Technology Matching® Applied

GaAs HBT GaAs MESFET InGaP HBT

support, contact

□ SiGe BiCMOS Si BiCMOS SiGe HBT

GaAs pHEMT GaN HEMT Si CMOS BIFET HBT Si BJT LDM0S

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UMZ-1197-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: 25MHz 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 | 4130 | | 4730 | MHz | |
| Tuning Voltage | 0.2 | | 7 | V _{DC} | |
| Tuning Sensitivity | | 150 | | MHz/V | |
| Output Power | -3 | 0 | 3 | dBm | |
| | -3 | | | dBm | At V _T =0 |
| Output Phase Noise | | -60 | -55 | dBc/Hz | 1kHz |
| | | -88 | -83 | dBc/Hz | 10kHz |
| | | -108 | -103 | dBc/Hz | 100kHz |
| | | -128 | -123 | dBc/Hz | 1000 kHz |
| Second Harmonic | | -15 | -10 | dBc | |
| Frequency Pulling | | 3 | 5 | MHz p-p | At 12dBr, all phases |
| Tuning Port Capacitance | | 20 | | pF | |
| Modulation Bandwidth | | 5000 | | kHz | 3dB BW |
| Frequency Pushing | | 5 | 8 | MHz/V | |
| Power Supply | | | | | |
| Operating Voltage | | 5 | | V | |
| Supply Current | | 28 | | mA | |





Package Drawing & Pin Outs

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

