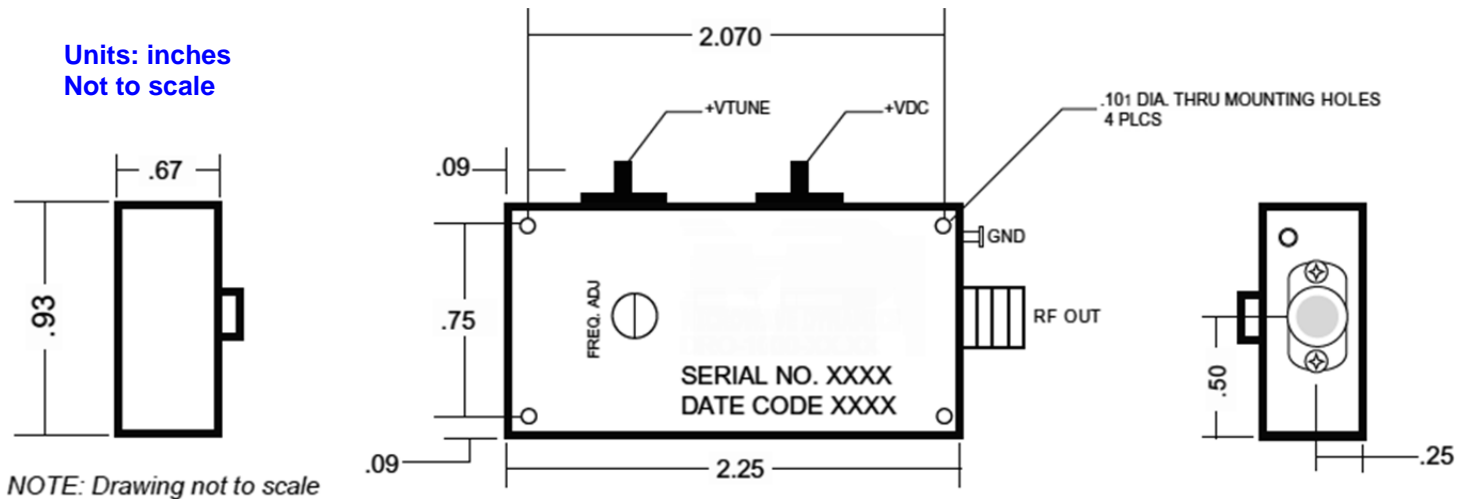


## Dielectric Resonant Oscillator, 1-50 GHz, 150 MHz Bandwidth +13 to +25 dBm Output Power, 10-15 Volts



### FEATURES

- \* LOW MICROPHONICS
- \* LOW POWER CONSUMPTION
- \* UP TO +25 dBm OUTPUT POWER
- \* AVAILABLE FROM 1-50 GHz
- \* OPERATING RANGE: -55°C TO +105°C
- \* DIELECTRIC RESONATOR
- \* INTERNAL VOLTAGE REGULATOR
- \* 150 MHz BANDWIDTH
- \* LOW PHASE NOISE
- \* MIC FABRICATION

### APPLICATION

- \* SATELLITE COMMUNICATIONS
- \* CABLE TV LINKS (CATV)
- \* LOCAL AREA NETWORKS (LAN)
- \* GLOBAL POSITIONING SYSTEMS (GPS)
- \* TEST EQUIPMENT
- \* POINT TO POINT
- \* UP/DOWN CONVERTERS
- \* TRANSMITTER & RECEIVERS
- \* DIGITAL RADIOS
- \* MISSILE GUIDANCE
- \* SPACE, MILITARY, COMMERCIAL



### PHASE NOISE ENVELOPE

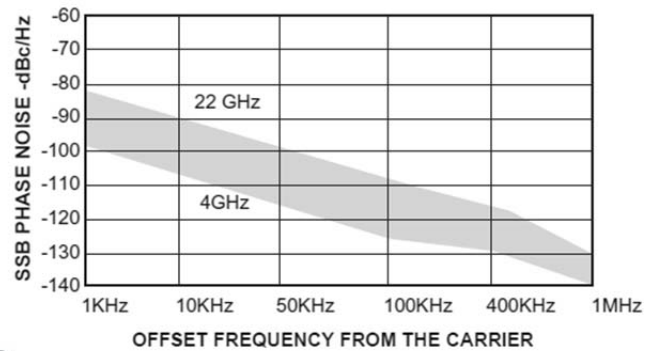
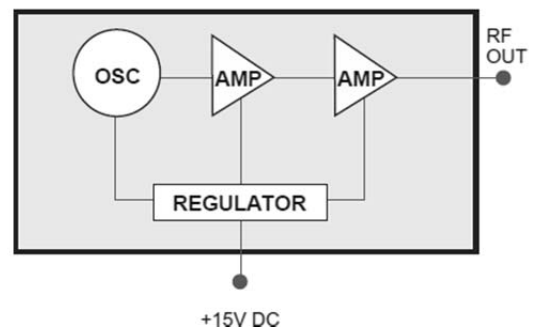


FIGURE A

### BLOCK DIAGRAM



**Order Examples: RDRO-17-13d-15V-s12**

**Description:** (Dielectric Resonant Oscillator, 17 GHz, +13dBm Output Power, 15Volts)

## Dielectric Resonant Oscillator, 1-50 GHz, 150 MHz Bandwidth +13 to +25 dBm Output Power, 10-15 Volts

Specifications	
Single Frequency	<b>1.00 to 50.00 GHz</b>
Mechanical Tuning Range	100 MHz
Electrical Tuning	Optional
Power Output	+13 dBm, up to + 20 dBm Optional
Load VSWR, Maximum	2.0: 1
Power Requirements	+15, +12, +10 VDC, 90 mA
Pushing / Pulling	10 ppm/V Max / +/- 90 ppm Max
Frequency Stability	4 ppm /°C
Phase Noise	See Phase Noise Envelope (Fig. A)
Spurious	-85 dBc
Harmonics	-25 dBc
Operating Temperature	0°C to 50°C Standard; -55°C to 105°C Optional
Storage Temperature	-55°C to +125°C
Connectors	SMA-Female or 2.92 mm-Female
Size	2.25" x 0.93" x 0.67"
Finish	Nickel