

Jersey Microwave

FREE-RUNNING DIELECTRIC RESONATOR OSCILLATORS - FRDRO SERIES -

Features

- ✓ Low Phase Noise
- ✓ Internal Voltage Regulator
- ✓ Low Microphonics – High Reliability
- ✓ Field Frequency Adjustable – Mechanical Tuning
- ✓ Fundamental Frequency Up To 18 GHz

Options

- High Output Power
- Multiple Output Ports
- Wide Frequency Electronic Tuning
- Field Replaceable Connector



Description

Jersey Microwave's Free-Running Dielectric Resonator Oscillator (FRDRO) series offers a complete line of free-running DRO products to cover the frequency range from 500 MHz to 34 GHz with the fundamental frequency up to 18 GHz offering no sub-harmonics and low output harmonics.

The hairpin band pass filter is incorporated at the output section of the high frequency unit where a frequency doubler is needed for output frequencies >18 GHz to reject the sub-harmonics (Fundamental Frequency) down to -70 dBc.

The mechanical frequency adjustment is offered on most of the fundamental FRDRO units. The frequency tuning range is up to 2% of the output frequency.

The electronic frequency adjustment is offered as an *Option*. The typical frequency range is up to 20 MHz over the voltage tuning range +1 to +10 VDC.

An Internal voltage regulator is standard on all models to provide protection from variations and transients introduced from various power supplies.

Note: Specifications are subject to change without notice

DS-300-01
230 Route 206, Suite #407,
Phone: (908) 684-2390 Ext 23
Email: sales@jerseymicrowave.com

Flanders, New Jersey 07836
Fax: (908) 684-2391
Website: <http://www.jerseymicrowave.com>

Jersey Microwave

Electrical Specifications

Model Number	FRDRO-XXXX-XX (XXXX-XX: Frequency in MHz-Output Power)
Output Frequency	500 MHz – 34 GHz
Output Power	+14 dBm typical / +12 dBm min.
Power Stability over Temperature	± 2 dB
Frequency Stability	± 5 ppm / °C
Harmonics	- 25 dBc max.
Sub-Harmonics (Fo > 18 GHz)	- 70 dBc max.
Spurious	-80 dBc Max.
Load VSWR	1.5:1 Max.
SSB Phase Noise	Consult factory for phase noise plot of particular frequency requirement.
Power Requirement: +12VDC or +15VDC	180 mA typical.
Operating Temperature	-30° C to +70° C
Connectors RF Output DC Supply	Fo < 20 GHz: SMA - Female Fo >20 GHz: 2.92 mm - Female RFI Feedthrough
Package Size (L x W x H)	Consult factory for Outline drawing

Jersey Microwave components can be tailored to meet your specific requirement.