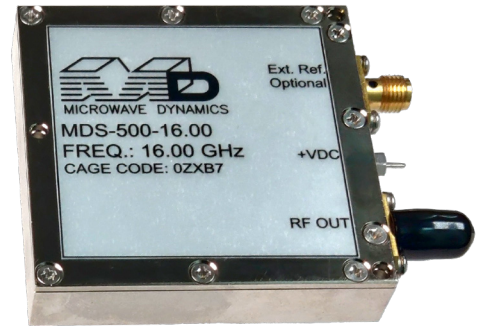


Datasheet

MDS-500

Frequency Synthesizer
 Tunable from 1 to 16 GHz



Product Features

Dielectric Resonator Oscillators

- Low Phase Noise and Microphonics
- .07 to 16 GHz, Tunable across the whole band
- Standard Temp Range: -40° to 85° C

Quantic MWD MWS-500 is a tunable frequency synthesizer that is tunable across the complete frequency band from 70 MHz to 16 GHz. Its operating temperature range is from -40° to +85° C, and it includes features, such as internal voltage regulator, low phase noise, MIC fabrication, 150 MHz bandwidth, low microphonics and low power consumption.

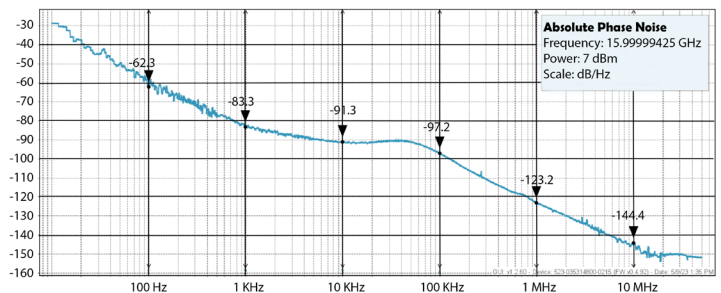
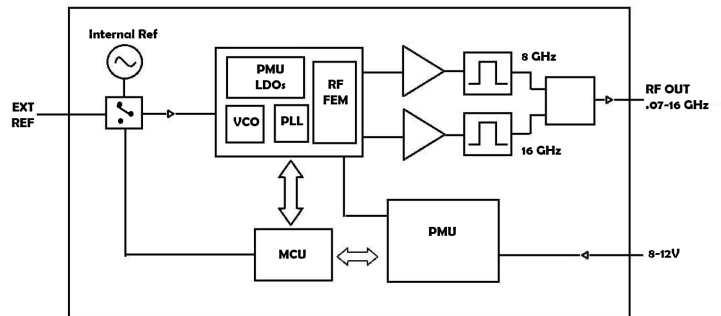
Applications

- Satellite Communications
- Space, Military, Industrial
- Transmitters/Receivers
- Up/Down Converters
- Test Equipment

Specifications

Electrical

Parameter	Unit of Measure	Value
Frequency	GHz	.07 to 16
Programmable Tuning Range	GHz	.07 to 16
Power Output	dBm	+16
Input VSWR	:1	2.0
Output VSWR	:1	2.0
Frequency Stability	ppm/°C	±0.025
Spurious	dBc	-60
Harmonics	dBc	-25
Phase Noise at 16 GHz	dBc	-90
Voltage	VDC	+8 to +12
Current, Max	mA	150 to 250



Mechanical and Environmental

Parameter	Value
Operating Temperature	-40° to 85° C Standard
Storage Temperature	-55° to +125° C
Connectors	SMA Female
Dimensions	2.25" x 2.25" x 0.67"
Housing Matertial and Finish	Aluminum, Nickel finish

Part Configurator

Part Number	Option Suffix [x]	Option	Notes
MDS-500	A	Fixed Frequency	Factory tuned to specific frequency
MDS-500	B	USB	Tunable frequency via USB
MDS-500	C	RS-422	Tunable frequency via DC power/Control, RS-422 port

MDS-500x-FF.FFFF

x = Letter from the Frequency suffix table

ff.ffff = Factory tuned to specified fixed frequency. DO NOT add frequency if Option is B or C

Example: part number for a 10.483 GHz MDS-500 operating from 0° to 50° C is MDS-500A-10.483.

Outline Drawing

