

# DIELECTRIC RESONATOR OSCILLATOR

**MDR2100-20500**

**20500 - 21500 MHz**

## Features

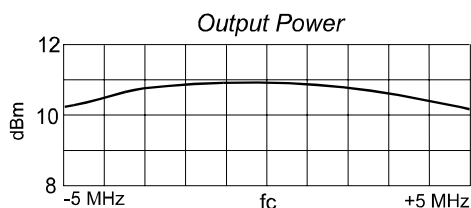
- Rugged Construction for Extreme Environmental Conditions
- High Frequency Stability
- Free Running, Mechanically Tuned

## Specifications<sup>1</sup>

CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -20°C to +65 °C
Frequency	20500 - 21500 MHz	20500 - 21500 MHz
Mechanical Tuning Bandwidth (MHz)	—	±20 Min.
Frequency Stability <sup>2</sup> (ppm)/ °C	4	5 Max.
Pulling, 12 dB RL (ppm)	—	±100 Max.
Pushing (ppm/Volt)	—	20 Max.
Harmonics (dBc)	-20	-15 Max.
Spurious (dBc)	-75	-70 Max.
Output Power (dBm) <sup>3</sup>	+11	+10 Min.
Power	Vdc <sup>4</sup> mA	+15 120
		+15 125 Max.

NOTES: Care should always be taken to effectively ground the case of each unit.

- Specifications labeled "min." or "max." are guaranteed in a 50 Ohm system over the specified temperature range.
- Averaged over the full temperature range.
- Higher output power is available.
- Alternate input voltage is available.
- Package must be verified by Spectrum Microwave.



## Absolute Maximum Ratings

Ambient Operating Temperature ..... -55°C to +100 °C  
 Storage Temperature ..... -62°C to +125 °C  
 Case Temperature ..... +125 °C  
 DC Voltage ..... +24 Volts

## Typical Performance Data

Phase Noise	Typical 20500 MHz	Typical 21500 MHz
Offset		
10 kHz	-88	-87
100 kHz	-113	-112
1 MHz	-133	-132

Phase Noise (dBc/Hz)  
20500 MHz

