

DIELECTRIC RESONATOR OSCILLATOR

MDR2100-20500

20500 - 21500 MHz

Features

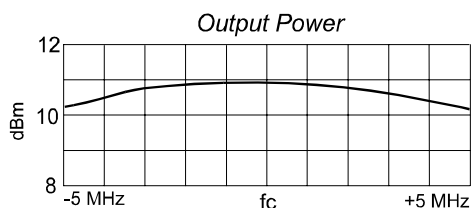
- Rugged Construction for Extreme Environmental Conditions
- High Frequency Stability
- Free Running, Mechanically Tuned

Specifications¹

| 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 ² (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) ³ | +11 | +10 Min. |
| Power | Vdc ⁴ mA | +15 120 |
| | | +15 125 Max. |

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

1. Specifications labeled "min." or "max." are guaranteed in a 50 Ohm system over the specified temperature range.
2. Averaged over the full temperature range.
3. Higher output power is available.
4. Alternate input voltage is available.
5. 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

