

DIELECTRIC RESONATOR OSCILLATOR

MDR2100-04500

4500 - 5500 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	4500 - 5500 MHz	4500 - 5500 MHz
Mechanical Tuning Bandwidth (MHz)	—	±10 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 4500 MHz	Typical 5500 MHz
Offset		
10 kHz	-103	-101
100 kHz	-128	-126
1 MHz	-148	-146

Phase Noise (dBc/Hz)
4500 MHz

