

# DIELECTRIC RESONATOR OSCILLATOR

**Model 518038**

**14 GHz to 15 GHz**

## Features

- Low Phase Noise
- Rugged Construction for Extreme Environmental Conditions
- High Frequency Stability
- Mechanically Tuned

## Specifications

CHARACTERISTIC	TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency	14 - 15 GHz	14 - 15 GHz
Output Power (dBm)	+13.0	+10.0 Min.
Power Flatness (dBm)	+/- 1.5	+/- 3.0
Frequency Stability (ppm)/ °C	4	3 to 5
Harmonics (dBc)	-20	-15 Max.
Spurious (dBc)	-80	-80 Max.
Phase Noise (14 GHz) @ 100 KHz (dBc/Hz)	-117	-115 Max.
Load VSWR	1.5:1	2.0:1 Max.
Power	Vdc	+15
	m A	70
		+15 to +20 90 Max.

## Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature .....	-55°C to +100 °C
Storage Temperature .....	-62°C to +125 °C
Case Temperature .....	+125 °C
DC Voltage .....	+24 Volts
Maximum DC Tuning Voltage .....	+20 Volts
Minimum DC Tuning Voltage .....	0 Volts

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

## Typical Performance Data

Phase Noise	Typical	Typical
Offset	14 GHz	15 GHz
1 kHz	-65	-64
10 kHz	-92	-90
100 kHz	-117	-116

