

# DIELECTRIC RESONATOR OSCILLATOR

Model 513142

5000 - 6000 MHz

## Features

- Low Noise Bipolar Transistor
- 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	5000 - 6000 MHz	5000 - 6000 MHz
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 (5000 MHz) @ 100 KHz (dBc/Hz)	-128	-126 Max.
Load VSWR	1.5:1	2.0:1 Max.
Power	Vdc mA	+15 to +20 90 Max.

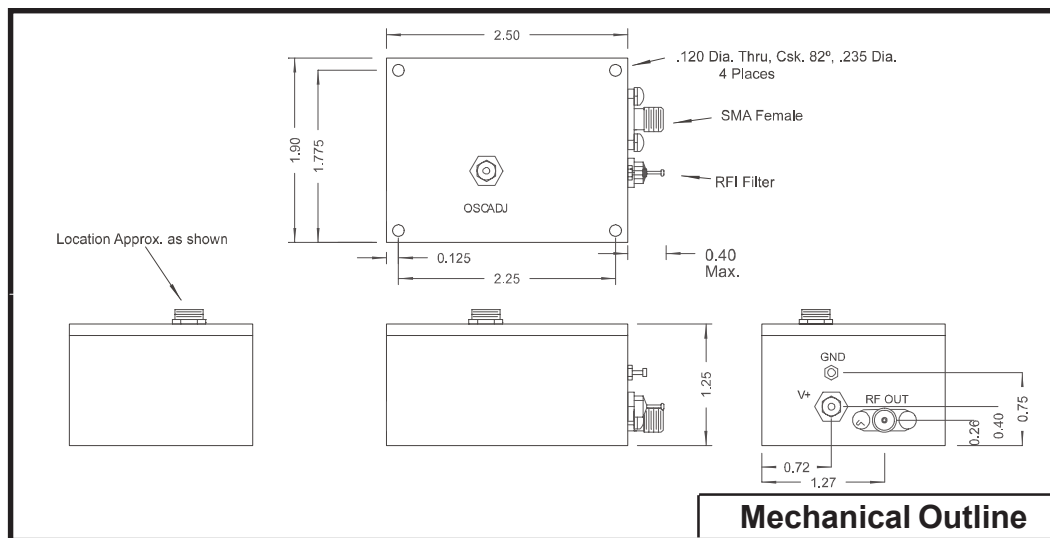
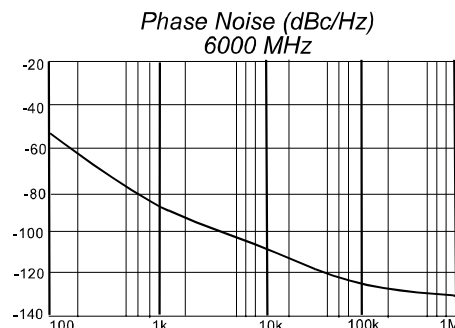
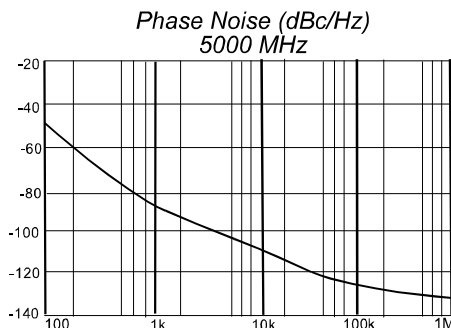
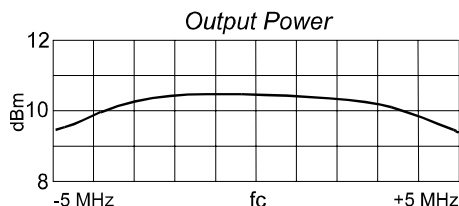
## Absolute Maximum (No Damage) Ratings

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 Offset	Typical 5000 MHz	Typical 6000 MHz
1 kHz	-87	-85
10 kHz	-109	-108
100 kHz	-128	-126



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