

DIELECTRIC RESONATOR OSCILLATOR

Model 512134

3000 - 4000 MHz

Features

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

Specifications

CHARACTERISTIC	TYPICAL $T_a = +25\text{ }^\circ\text{C}$	MIN/MAX $T_a = -55\text{ }^\circ\text{C to } +85\text{ }^\circ\text{C}$
Frequency	3000 - 4000 MHz	3000 - 4000 MHz
Output Power (dBm)	+13.0	+10.0 Min.
Power Flatness (dBm)	+/- 1.5	+/- 3.0
Frequency Stability (ppm)/ $^\circ\text{C}$	4	3 to 5
Harmonics (dBc)	-20	-15 Max.
Spurious (dBc)	-80	-80 Max.
Phase Noise (3000 MHz) @ 100 KHz (dBc/Hz)	-131	-129 Max.
Load VSWR	1.5:1	2.0:1 Max.
Power	Vdc mA	+15 70 +15 to +20 90 Max.

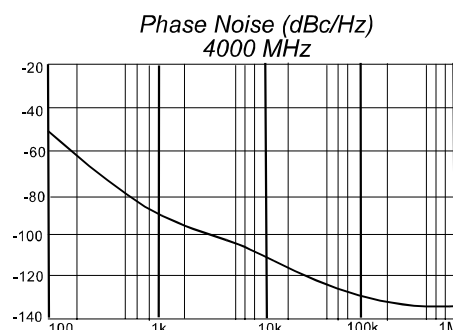
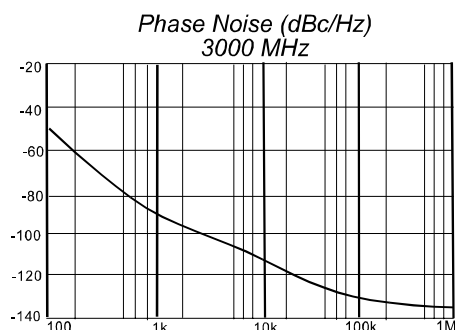
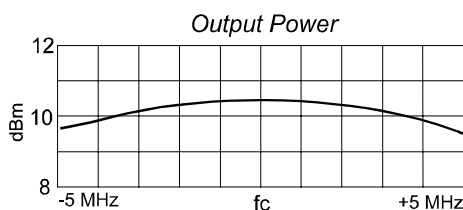
Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature $-55\text{ }^\circ\text{C to } +100\text{ }^\circ\text{C}$
 Storage Temperature $-62\text{ }^\circ\text{C to } +125\text{ }^\circ\text{C}$
 Case Temperature $+125\text{ }^\circ\text{C}$
 DC Voltage +24 Volts
 Maximum DC Tuning Voltage +20 Volts
 Minimum DC Tuning Voltage 0 Volts

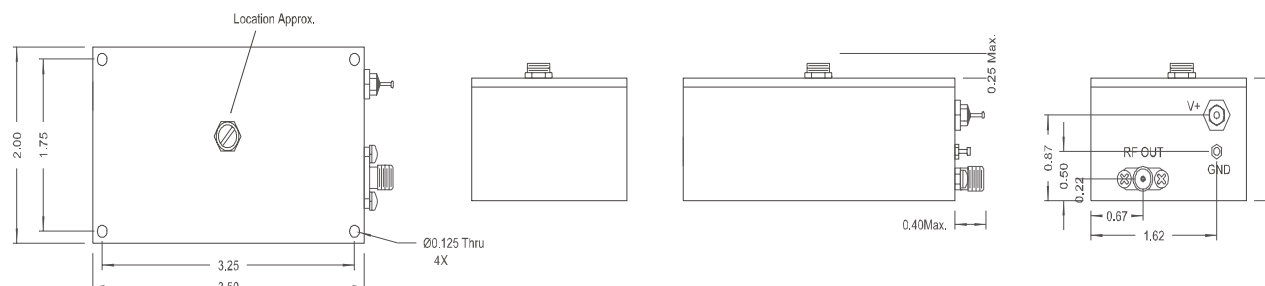
NOTE: Care should always be taken to effectively ground the case of each unit.

Typical Performance Data

Phase Noise	Typical	Typical
Offset	3000 MHz	4000 MHz
1 kHz	-91	-90
10 kHz	-112	-110
100 kHz	-131	-130



Mechanical Outline



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 Rev. 5/5/10

www.SpectrumMicrowave.com Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001