

OVEN CONTROLLED CRYSTAL OSCILLATOR

PLUG-IN MODEL: OXO10-1-349

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ Fast Warm-up Time
- ▶ Low Power Consumption
- ▶ Tight Frequency Stability
- ▶ Excellent Long-Term Stability
- ▶ El. Frequency Tuning Input
- ▶ Reference Voltage Output
- ▶ Small CO-8 package



SPECIFICATIONS

Nominal Frequency F_N	10.000 MHz
Frequency Stability	
Within operating range	$\leq \pm 7 \times 10^{-9}$
vs. supply voltage changes $V_s \pm 10\%$	$\leq \pm 5 \times 10^{-10}$
vs. load changes 50 Ohm $\pm 10\%$	$\leq \pm 5 \times 10^{-10}$
Aging (after 30 days of continuous operation)	
Per day	$\leq \pm 5 \times 10^{-10}$
Per Year	$\leq \pm 5 \times 10^{-8}$
10 Years	$\leq \pm 3 \times 10^{-7}$
Frequency Tuning Range	$\geq \pm 4 \times 10^{-7}$
Tuning Voltage Range V_c	0 to 5 V
Reference Voltage Output V_{REF}	+5 V $\pm 5\%$
Supply Voltage V_s	+12.0 V $\pm 10\%$
Supply Current I_s	
Steady State @ +25 °C	≤ 200 mA
Steady State @ +40 °C	≤ 500 mA
During Warm-up	≤ 600 mA
Warm Up Time	
To $dF/F_0 < \pm 5 \times 10^{-8}$ referred to F_0 after 1 hour	≤ 10 min.
Output signal type	Sine wave
Initial output level	$\geq +3$ dBm
Output load impedance:	50 Ohm
Harmonics:	≤ -30 dBc
Typical Phase Noise	
10 Hz	≤ -130 dBc/Hz
100 Hz	≤ -150 dBc/Hz
1 kHz	≤ -155 dBc/Hz
10 kHz	≤ -165 dBc/Hz
100 kHz	≤ -165 dBc/Hz
Temperature Ranges	
Operating	-40 °C ... +75 °C
Storage	-40 °C ... +85 °C

Package #	349
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Dimensions: Inches[Millimeters]

Port Configuration				
Control Voltage In V_c	Reference Voltage V_{REF}	Supply Voltage V_s	RF Output	GND., Case
1	2	3	4	5

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PERFORMANCE PLOTS

