OVEN CONTROLLED CRYSTAL OSCILLATOR
SURFACE MOUNT MODEL: OXO100-1-402

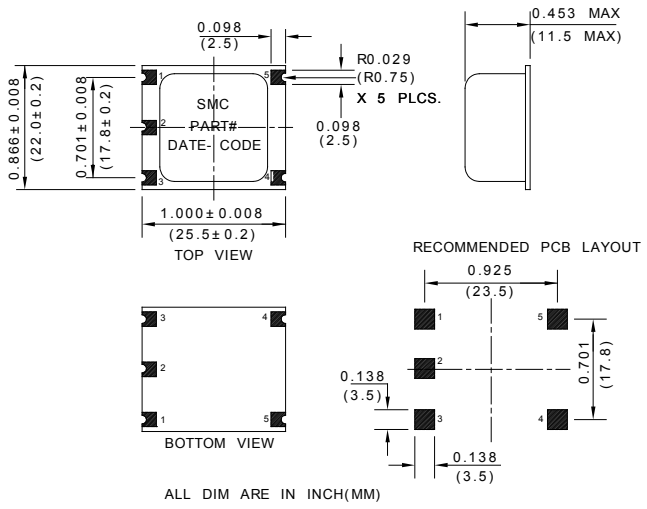
FEATURES:

- **Exceptionally Low Phase Noise**
- **Fast Warm-up Time**
- **Low Power Consumption**
- **Tight Frequency Stability**
- **Excellent Long-Term Stability**
- **EI. Frequency Tuning Input**
- **Reference Voltage Output**
- **Small Size Surface Mount**

SPECIFICATIONS

Nominal Frequency F_N	100.000 MHz
Initial Frequency Tolerance	
T_A = +25 °C, after power on for 30 min.	≤ ± 3 x 10^{-7}
Frequency Stability	
Within operating range	≤ ± 5 x 10^{-8}
vs. supply voltage changes V_S ± 5%	≤ ± 1 x 10^{-9}
vs. load changes 50 Ohm ± 5%	≤ ± 5 x 10^{-9}
Aging (after 30 days of continuous operation)	
Per day	≤ ± 2 x 10^{-9}
Per Year	≤ ± 3 x 10^{-7}
15 Years	≤ ± 3 x 10^{-6}
Frequency Tuning Range	≥ ± 4 ppm
Tuning Voltage Range V_C	0 to 10 V
Reference Voltage Output V_{REF}	+10 V ± 5%
Supply Voltage V_S	+12.0 V ± 5%
Supply Current I_S	
Steady State @ +25 ºC	≤ 120 mA
During Warm-up	≤ 300 mA
Warm Up Time	
To dF/F_0 < ± 1 x 10^{-7} referred to F_0 after 1 hour	≤ 5 min.
Output signal type	Sine wave
Initial output level	+5 dBm
Output load impedance:	50 Ohm ± 10%
Typical Phase Noise	
10 Hz	-100 dBc/Hz
100 Hz	-130 dBc/Hz
1 kHz	-150 dBc/Hz
10 kHz	-165 dBc/Hz
100 kHz	-168 dBc/Hz
Temperature Ranges	
Operating	-20 °C ... +70 °C
Storage	-45 °C ... +90 °C

Package #	402



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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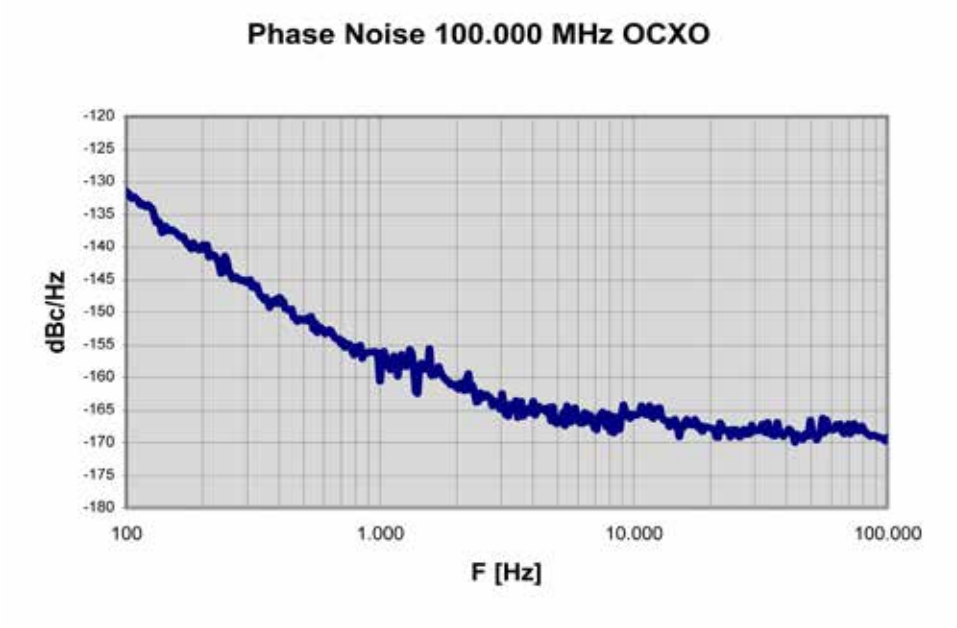
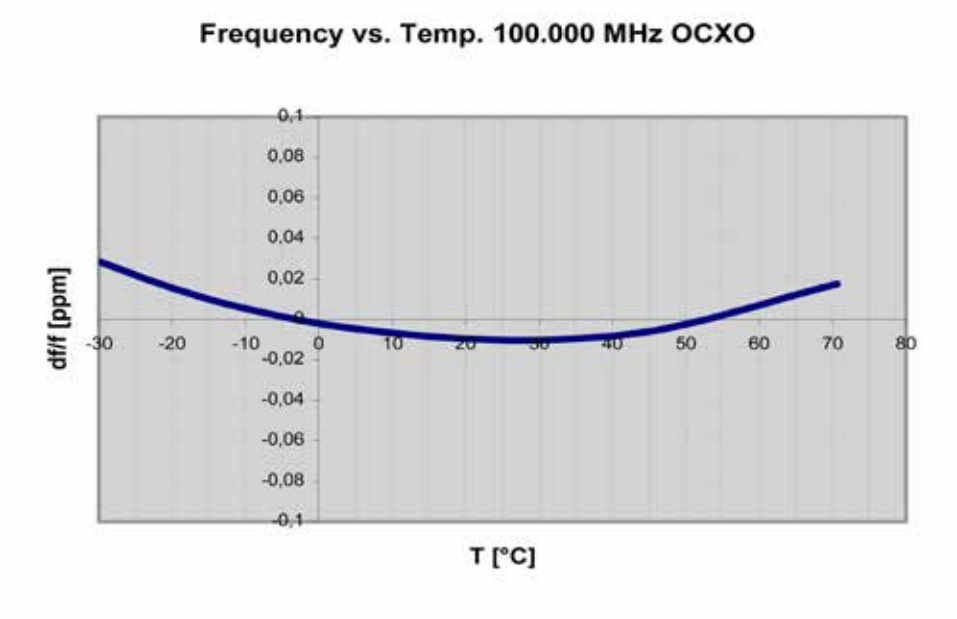
PERFORMANCE PLOTS





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