

HIGH PERFORMANCE CRYSTAL OSCILLATOR

PLUG-IN MODEL: HPXO100-1-484

Frequency: 100 MHz

FEATURES:

- ▶ Excellent Performance
- ▶ Oven / Voltage Controlled
- ▶ Ultra Low Phase Noise
- ▶ High Stability
- ▶ Hermetically Sealed Package
- ▶ Low-G-sensitivity



SPECIFICATIONS

Frequency	100 MHz	
Frequency Tuning Range	±2.5 ppm (Min.)	
Frequency Stability Over Temperature	±100 ppm (Typ.) / ±200 ppm (Max.)	
Initial Frequency Tolerance	< 0.3 ppm ($V_t = +5$ V; $T_A = 25$ °C, Power On > 30 Minutes)	
Aging	±0.3 ppm/year (Max.)	
Warm-Up Time	≤ 5 Min.	
Phase Noise	dBc/Hz (Max.)	
10 Hz	-108	
100 Hz	-138	
1 kHz	-164	
10 kHz	-180	
100 kHz	-185	
1 MHz	-185	
Jitter ¹	≤ 50 fs	
Allan Variance (t = 1 Sec.)	≤ 50 x 10 ⁻¹¹	
Output Power (Sinewave)	> 13 dBm	
Harmonics	≤ -30 dBc ≤ -100 dBc	
Frequency Pushing	≤ 5 ppb (V_s ±5%)	
Frequency Pulling	≤ 5 ppb (50 Ohms ±5%)	
G Sensitivity (X, Y or Z Axis)	≤ 1 ppb/g	
Output Impedance	50 Ohms (Nom.)	
Tuning Voltage (V_T)	0 - 10 V	
Supply Voltage V_s	+5.0 V ±5%	
Supply Current I_s		
Steady State @ +25 °C	≤ 2.0 W	
During Warm-up	≤ 5.0 W	
Temperature Range (OTR)	Min.	Max.
Operating	-20 °C	+70 °C
Storage	-40 °C	+85 °C

¹ 12 kHz to 20 MHz (RMS)

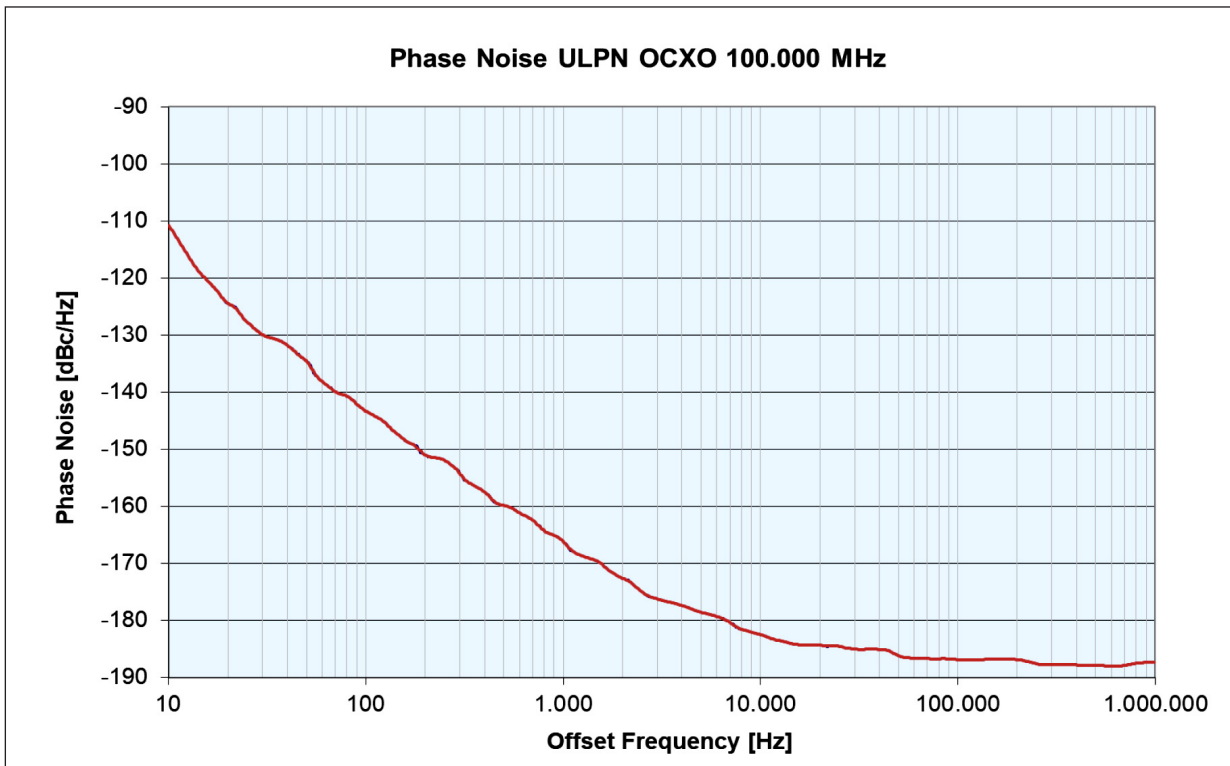
Package #	484			
TOLERANCES: XXX±0.008 UNLESS NOTED				
Port Configuration				
Tuning Voltage V_T	Supply Voltage V_s	RF Output	GND.	NC
3	5	1	2	4

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PERFORMANCE PLOTS