OVEN CONTROLLED CRYSTAL OSCILLATOR

AOCJY7 Series





FEATURES:

- \bullet Exceptional Close to the carrier Maximum Phase Noise of -160dBc/Hz @ 1kHz &
- -174dBc/Hz @ 10kHz offset from 100.0 MHz Carrier
- SC-Cut, High "Q" resonator based design
- 100.0MHz carrier frequency
- Excellent Frequency Stability of ± 50.0 ppb over the operating temperature range of -20°C to $+70^{\circ}\text{C}$
- Tuned Sinewave output into a 50Ω load
- Industry Standard, 25.4x25.4x12.7 mm, RoHS compliant & Pb free package

APPLICATIONS:

- COTS Military & Industrial Radios & Timing Circuits
- Cellular Infrastructure
- Radar Systems
- Test & Measurement Equipment
- GPS Tracking with precision hold-over accuracy
- WiMax / WLAN
- Precision primary frequency reference clocks

> STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency		100.000		MHz	
Supply Voltage	+11.4	+12.0	+12.6	V	
Supply Current (Start up)			400	mA	
Supply Current (Stabilized)			200	mA	
Sine Output Level (with 50Ω load)	8	11	12	dBm	
Harmonics (Reference to Carrier)			-30		
Phase Noise (SSB @10Hz)			-90	dBc/Hz	
Phase Noise (SSB @100Hz)			-125	dBc/Hz	
Phase Noise (SSB @1KHz)			-160	dBc/Hz	
Phase Noise (SSB @10KHz)			-174	dBc/Hz	
Phase Noise (SSB @100KHz)			-174	dBc/Hz	
Adjust. Tolerance (Typ control voltage)			±100	ppb	
Freq vs Supply (Vs±5%)			±5	ppb	
Freq vs Load (Load±5%)			±5	ppb	
Freq vs Temp (Ref to Freq @ 25°C)			±50	ppb	
Operating Temp	-20	25	+70	°C	
Aging per year(After 30 days)			±100	ppb	
Warm Up (10mn-2Hr on)			±10	ppb	
Control Voltage	0	2.5	5	V	
Pulling Range	±1000			ppb	
Linearity			10		
Storage temperature	-55		+100	$^{\circ}\!\mathrm{C}$	

By default, AOCJY7 OCXO is constructed with the following key specifications:

i) Supply Voltage = 12.00 Volts

ii) Operating Temperature Range = -20°C to +70°C

iii) RF Output = Pure Sinewave into 50Ω





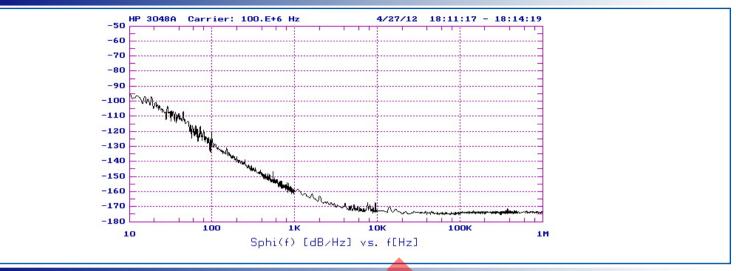
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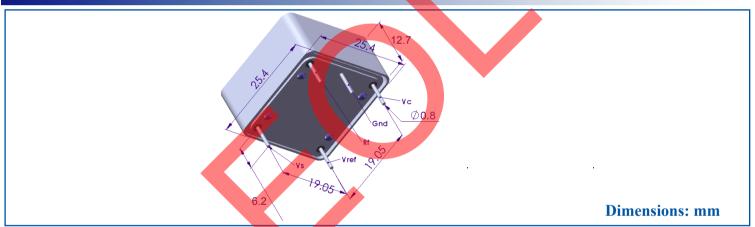




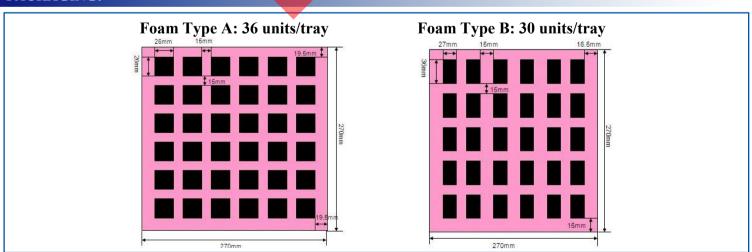
TYPICAL PHASE NOISE PERFORMANCE:



OUTLINE DRAWING:



PACKAGING:



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AOCJY7-100.000MHz