

NI Type Oven Controlled Crystal Oscillator

RoHS Compliant Optional

FEATURE

1. Typical 36.3 x 27.2 x 19.1 mm.
2. SC-Cut Crystal
3. High stability ; Low Phase Noise.
4. Sine Wave or CMOS output ; Fast Warm-up.



ORDERING INFORMATION

N	I	A	H	C	D	W	-	N	L	-	?
OCXO	Package (mm)	Supply Voltage(V)	Pulling Range (ppm)	Freq. Stability (ppb)	Temp. Range (°C)	Output Logic and Symmetry	Dash	Pin Out	Lead Free	Dash	Freq.(MHz)
	L :36.3 W:27.2 H:19.1	A:12.0 T:5.0	H: ±0.4	A: ± 5 B: ± 10 C: ± 20 E: ± 30 G: ± 50	B: 0~+50 E: 0~+70 D: -30~+70	50±10%		N:Normal	F:RoHS Compliant L:Not RoHS Compliant		xx.xxxxxx
						CMOS 15pF		Please Refer to "OUTLINE DRAWING"			
						Sine Wave					

Ordering Example: NIAHCDW-NL-10.000000 MHz

I-TYPE; V_{DD}: 12V; Pulling Range: ±0.4ppm; Freq. Stability: ±20ppb; Temp. Range: -30°C to +70°C; Sine Wave; Pin Out: Normal; Not RoHS Compliant; Freq. 10.000000MHz.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppb	A: ±5	B: ±10	C: ±20	E: ±30	G: ±50
B	0 to + 50	○	○	○	○	○
E	0 to + 70	△	○	○	○	○
D	-30 to + 70	△	△	○	○	○

○:Standard △:Available (case by case) ×:Not available

OUTLINE DRAWING



UNIT: $\frac{\text{Inch}}{\text{mm}}$

Pin	Pin Out
1	VCO INPUT
2	REFERENCY VOLTAGE
3	+VDC
4	R.F. OUTPUT
5	0 VOLTS & CASE

MARK	
MODEL:	IAHCDW
Freq.:	10.000MHz
S/N :	0000-0000
DATE:	0528

OCXO

	Min.	Nominal	Max.	Note	Unit
Output					
Frequency		10.00			MHz
Wave Form		Sine Wave			
Level	6.0	8.0	10.0		dBm
Load		50			Ω
Harmonics		-30			dBc
Spurious		-60			
Frequency Stability					
Ambient			± 20	Reference to +25 °C	ppb
Operating Temperature	-30		+70		°C
Aging					
At time of shipment			± 0.5		ppb
After indefinite storage					
Daily			± 0.5	After 30 days	ppb
Yearly			± 100		
10 years			± 300		
Voltage			± 5	VDC $\pm 5\%$ change	ppb
Warm-up			± 20	In 5 minutes @ +25°C (Reference to 4 Hour)	
Phase Noise @ 10 MHz					
@ 10 Hz			-120		dBc
@ 100Hz			-135		
@ 1 kHz			-150		
@ 10 kHz			-150		
@ 100 kHz			-150		
Electrical Frequency Adjustment					
Range	0.4		0.9		\pm ppm
Control	0.0		8.0		V
Slope		Positive			
Center	3.2	4.0	4.8	Control Voltage at which nominal Frequency occurs at time of shipment	V
Input impedance	100				k Ω
Input Power					
Voltage	11.4	12.0	12.6		V
@turn on (-30~+70°C)			3.8		W
Steady state @25°C			1.5		
Reference Voltage					
Voltage	7.6	8.0	8.4	Optional 4.0V(Note1) 5.0V (Note2)	V
Load	9.0		∞		k Ω
Temperature Stability			± 0.015		VDC

Note 1: For all +5 V Input Power Units.

Note 2: For +12 V CMOS Units.

* All aging stabilities are after storage of up to 1 year and apply after 30 days of continuous operation.

The daily aging rate also applies at the time of shipment from factory.

* The Electrical Frequency Adjustment Range is sufficient for the life of the oscillator.

Specification subject to change with Frequency.

Available Frequency Range: 5MHz to 80MHz Including 5.0,10.0, 16.384, 19.44, 24.576 and 32.768MHz.