NA Type Oven Controlled Crystal Oscillator

RoHS Compliant Optional

FEATURE

1. Typical 25.4 x 25.4 x 15.0 mm.
2. SC-Cut Crystal
2. High stability; Low Phase Noise
3. Sine Wave or CMOS output; Fast warm-up.

ORDERING INFORMATION

N OCXO	A Package (mm)	T Supply Voltage(V)	H Pulling Range (ppm)	C Freq. Stability (ppb)	E Temp. Range (°C)	W Output Logic and Symmetry		—	N Pin Out	L Lead Free	—	? Freq.(MHz)
	L :25.4 W:25.4 H :15.0	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	Output \ Symmetry	50±10%		N:Normal A:Optional Please refer to "OUTLINE DRAWING"	F:RoHS Compliant L:Not RoHS Compliant		xx.xxxxxx
						CMOS 15pF	K					
						Sine Wave	W					

Ordering Example: NATHCEW-NL-10.000000 MHz

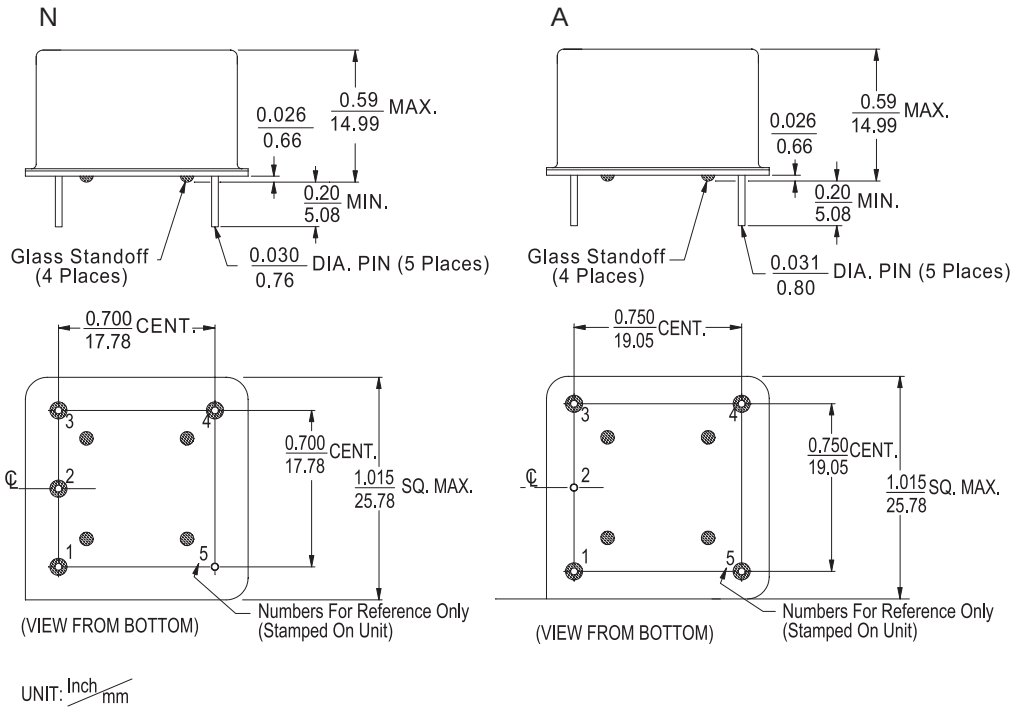
A-TYPE; V_{DD}: 5V, Pulling Range: ±0.4ppm; Freq. Stability: ±20ppb; Temp. Range: 0°C to +70°C; Sine Wave; Pin Out: Normal; Not RoHS Compliant; Freq. 10.000000MHz.

FREQ. STABILITY vs. TEMP. RANGE

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

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

OUTLINE DRAWING



UNIT: Inch / mm

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

Pin	Pin Out - A
1	R.F. INPUT
2	0 VOLTS & CASE
3	VCO INPUT
4	REFERENCE VOLTAGE
5	+VDC

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

*Contact Sales@taitien.com.tw for special request.

ELECTRICAL SPECIFICATION

	Min.	Nominal	Max.	Note	Unit
Output					
Frequency		10.00			MHz
Wave Form		Sine Wave			
Level	2.0	4.0	6.0		dBm
Load		50			Ω
Harmonics		-25			dBc
Spurious		-60			
Frequency Stability					
Ambient			±20	Reference to +25 °C	ppb
Operating Temperature	0		+70		°C
Aging					
At time of shipment			±1.0		ppb
After indefinite storage					
Daily			±1.0	After 30 days	ppb
Yearly			±100		
10 years			±350		
Voltage			±10	VDC ±5% change	
Warm-up			±10	In 3 minutes @ +25°C (Reference to 1 Hour)	
Phase Noise @ 10 MHz					
@10 Hz			-115		dBc
@100Hz			-135		
@1 kHz			-140		
Electrical Frequnecy Adjustment					
Range	0.4		1.0		±ppm
Control	0.0		4.0		V
Slope		Positive			
Center	1.4	2.0	2.6	Control Voltage at which nominal Frequency occurs at time of shipment	V
Linearity			10		%
Input impedance	50				kΩ
Input Power					
Voltage	4.75	5.0	5.25		V
@turn on(0~+70°C)			3.7		W
Steady state @25°C			1.5		
Reference Voltage					
Voltage	3.8	4.0	4.2		V
Load	9.0		∞		kΩ
Temperature Stability			±0.01		VDC

* 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 40MHz including 5.0, 10.0, 16.384, 19.44, 24.576 and 32.768 MHz.