

NA Type Oven Controlled Crystal Oscillator

RoHS Compliant Optional

FEATURE

1. Typical 25.4 x 25.4 x 12.7 mm.
2. Stratum 3 Performance.
3. Fast Warm-up.



ORDERING INFORMATION

N	A	T	E	I	D	J			T	N	L	-	?
OCXO	Package (mm)	Supply Voltage (V)	Pulling Range (PPM)	Freq. Stability (PPb)	Temp. Range (°C)	Output Logic and Symmetry			Oscillator Mode	Appearance	Marking	Dash	Freq. (MHz)
	L:25.4 W:25.4 H:12.7	A:12 T:5.0 F:3.3	D: ±1 E: ±5	F: ±40 G: ±50 J: ±80 H: ±100 I: ±200 K: ±500	B: 0~+50 E: 0~+70 C: -20~+70 D: -30~+70 T: -40~+70 L: -40~+85	TTL 15pF TTL 50pF CMOS 15pF CMOS 50pF SINE WAVE	50±5% A E J F	50±10% B R K G W	A:AT Fundamental T:AT 3 rd Overtone F:AT 5 th Overtone S:AT 7 th Overtone H:SC 3 rd Overtone I:SC 5 th Overtone J:SC 7 th Overtone	N:Normal	L:Laser Marking F:Laser Marking (RoHS Compliant)		xx.xxxxxx

Ordering example: NATEIDJTNL-10.000000 MHz

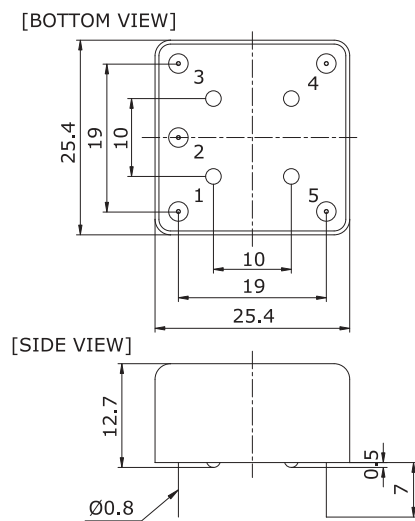
VCC: 5V, Frequency Stability: ±200ppb, -30°C to +70°C. Load: CMOS 15pF, Symmetry: 50±5%. AT-3rd Overtone, Laser Marking, Freq. 10.000000MHz

FREQ. STABILITY vs. TEMP.RANGE {O:AT O:SC}

Temp.(°C)	PPB	E: ±30	F: ±40	G: ±50	J: ±80	H: ±100	I: ±200	K: ±500
B 0 ~ +50	0 ~ +50	△	△	△	○	○	○	○
E 0 ~ +70	0 ~ +70	△	△	△	○	○	○	○
C -20 ~ +70	-20 ~ +70	X	△	X	△	○	○	○
D -30 ~ +70	-30 ~ +70	X	X	X	△	△	○	○
L -40 ~ +85	-40 ~ +85	X	X	X	X	△	△	○

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

OUTLINE DRAWING



PIN	FUNCTION
1	RF OUTPUT
2	GND/CASE
3	CONTROL VOLTAGE IN
4	N.C. or REF. VOLT. OUTPUT
5	SUPPLY VOLTAGE

MARK:
ATEIDJ
10.000000MHz
0145

UNIT:mm
Tolerance: ±0.5mm

ELECTRICAL SPECIFICATION

	Min	Nominal	Max	Note	Unit	
NOMINAL FREQUENCY		38.88			MHz	
TEMPERATURE RANGE						
Operating	-30		70		°C	
Storage	-40		85		°C	
POWER SUPPLY	4.75	5	5.25	Vcc±5%	V	
CURRENT CONSUMPTION						
At switch on			700		mA	
At steady state@25°C			260		mA	
FREQUENCY ADJUSTMENT						
Control voltage range	0.5		4.5		V	
Pulling range		5.0			±ppm	
Linearity			10		%	
Slope		Positive				
Reference voltage					V	
OUTPUT SIGNAL WAVEFORM						
Level	0.5		4.5	Square HCMOS	V	
Duty cycle	40		60		%	
Rise time / Fall time		4			ns	
Load		15		10KΩ//15pF±5%	pF	
Spurious						
Harmonics						
FREQUENCY STABILITY						
Vs temperature range		200		Reference to frequency at 25°C	±ppb	
Vs power supply		50		Vcc ±5%	±ppb	
Vs load		50		Ca ±5%	±ppb	
Vs warm up time at 25°C					±ppb	
AGING	1 day	1 year	10 years	After 30 Days of Operation		
Medium/long term stability	0.002	0.2			±ppm	
Allan variance	0.1 s	1 s	10 s			
					±ppb	
RETRACE	30mn	1h	24h	After 24 hours turn off		
					±ppb	
PHASE NOISE	1 Hz	10 Hz	100 Hz	1 KHz	10 KHz	100 KHz
		-90	-115	-140	-145	
						dBc/Hz

Available Frequency Range: 10MHz to 50MHz Including 10.0, 16.384, 19.44, 32.768, 38.88 MHz

Available Options: AT or SC cut Crystal, Different Input Voltage, Wide Electrical Adjustment.