TAITIEN
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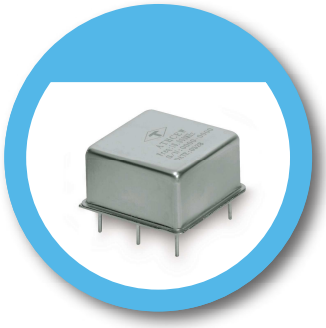
NA Type
25.4 x 25.4 mm Oven Controlled Crystal Oscillator

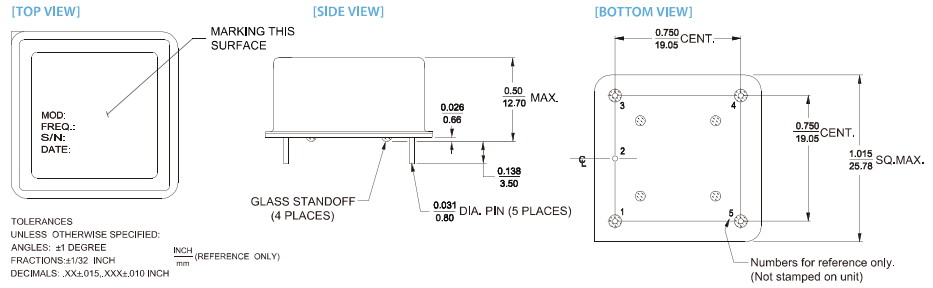


RoHS Compliant

FEATURE
- Dimension 25.4 x 25.4 x 12.7 mm typical.
- SC Cut Crystal.

APPLICATION
- SDH/SONET, Telecommunication base station
- Test and measurement equipment
- Synthesizer, Digital switch, Reference Timing Circuit

DIMENSION



PIN CONNECTIONS	
PIN	FUNCTION
1	R. F. OUTPUT
2	0 VOLTS & CASE
3 (See Note 1)	VCO INPUT or NOT CONNECTED
4 (See Note 1)	REFERENCE VOLTAGE or NOT CONNECTED or OVEN MONITOR
5	+VDC

Note:
1. If the specification does not specify parameters for either PIN3 or PIN4 then that respective PIN is NOT internally CONNECTED.

ELECTRICAL SPECIFICATION

Parameter		Min.	Typ.	Max.	Unit	Test Condition & Notes
Output	Frequency		10		MHz	Available frequency range is from 5Hz to 40MHz. Standard frequencies are 10, 12.8, 13, 15.36, 19.2, 20, 25, 38.88MHz.
	Waveform		Rectangular			Since wave output is available. Consult factory for more information.
	Level		LVTTL			
	"1" Level	2.4			V	
	"0" Level			0.4		
	Load		15		pF	
	Duty cycle	45	50	55	%	@ +1.4 V
	Spurious			-60	dBc	
Frequency Stability						
	Ambient	-10		+10	ppb	-30°C to +70°C, referenced to +25°C Refer to Freq. Stability Vs Temp. Range table.
	Aging					
	Daily	-0.5		+0.5	ppb	after 30 days
	Yearly	-50		+50		
	10 years	-0.3		+0.3	ppm	
	Voltage	-5.0		+5.0	ppb	±5% hange
	Warm-up	-10		+10		In 10 minutes @+25°C, referenced to 1 hour
	Phase Noise			-120	dBc/Hz	@ 10 Hz
				-135		@ 100 Hz
				-145		@ 1 kHz
				-150		@ 10 kHz
Electrical Frequency Adjustment						
	Range			-0.5	ppm	VCO @ 0 V
		+0.5				VCO @ +3.3 V
	Control	0	1.65	3.3	V	
	Slope		Positive			
	Input impedance	100			kΩ	
Input Power	Voltage	3.135	3.3	3.465	V	5.0V input voltage is available. Consult factory for control voltage and output level.
	Current			1000	mA	@ turn on
	Steady state			1.3	W	@ +25°C

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C) \ ppb	±3	±5	±10
0 ~ +70	○	○	○
-30 ~ +70	△	○	○
-40 ~ +85	△	○	○

* ○: Available △:Conditional X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.

Model Numbering Guide – OCXO

Available options

Type	Package (mm)	Supply Voltage (V)	Pulling Range (ppm)	Freq. Stability (ppb)	Temp. Range(°C)	Output Logic and Symmetry	Oscillator Mode	Pin out	Lead Free	Dash	Freq. (MHz)
N: OCXO	K:14.3x9.3 (SMD) F: 20.3x12.7 P: 20.6x20.6 J: 25.4x22.1 (SMD) A: 25.4x25.4 I: 36.3x27.2	E: 3.3 T: 5 A: 12	K: ±0.2 H: ±0.4 D: ±1 G: ±3 E: ±5 N: No Voltage Control Function	R: ±2 A: ±5 B: ±10 C: ±20 E: ±30 G: ±50	B: 0~+50 E: 0~+70 D: -30~+70 L: -40~+85	W: Sine wave J: CMOS15pF / 50±5%	Not selectable by customer	N : Normal (Please refer to "outline drawing")	F: RoHs Compliant	–	XX.XXXXXX

N A T H C E W H N F – 10.000000

*Not all combinations of options are available.

Example: NATHCEWHNF-10.000000

Type	OCXO
Package	25.4 x 25.4 mm
Supply Voltage(V)	5 V
Pulling Range	±0.4 ppm
Freq. Stability	±20 ppb
Temp Range	0~+70 °C
Output	Sine wave
Pin Out	Normal
Lead Free	RoHs Compliant
Frequency	10.000000 MHz