

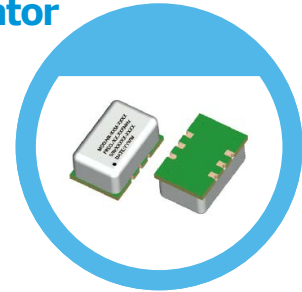
NA Type 14.5 x 9.6 mm Oven Controlled Crystal Oscillator

FEATURE

- Dimension 14.5 x 9.6 x 6.5 mm typical
- 6-Pin SMD package
- Frequency Range, 10 MHz to 40MHz
- ± 30 ppb stability over -40 to 85°C
- Stratum 3 (Overall ± 4.6 ppm including 20 years aging.)

TYPICAL APPLICATION

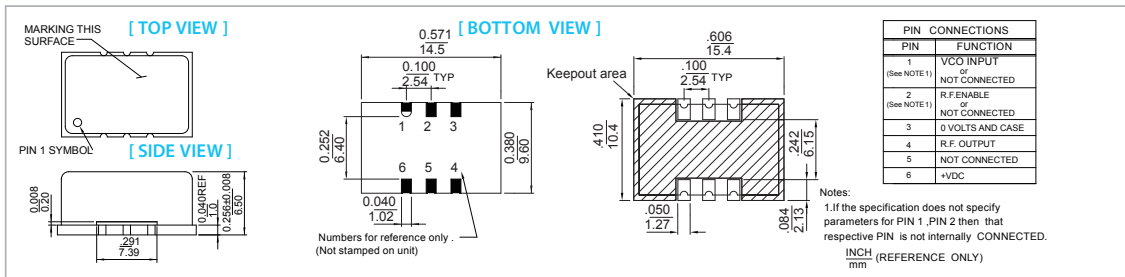
- SDH/SONET, Telecommunication base station
- Test and measurement equipment
- Synthesizer, Digital switch, Reference Timing Circuit
- Packet Timing Protocol (e.g. 1588)



RoHS Compliant

DIMENSION

SOLDER PAD LAYOUT



ELECTRICAL SPECIFICATION

Parameter	Min.	Typ.	Max.	Unit	Test Condition & Notes
Output Frequency	—	20	—	MHz	Available frequency range is from 5MHz to 40MHz. Standard frequencies are 10, 12.8, 19.2, 20, 25, and 38.88MHz.
Waveform	—	Rectangular	—	—	
Level	—	HCMOS	—	—	
"1" Level	2.4	—	—	V	
"0" Level	—	—	0.4	V	
Load	—	15	—	pF	
Duty Cycle	45	50	55	%	@ +1.65 V
Spurious	—	—	-60	dBc	
Frequency Stability Ambient	-30	—	+30	ppb	-40°C to +85°C, referenced to +25°C Refer to Freq. Stability Vs Temp. Range table.
Aging	—	—	—	—	
Daily	-2.0	—	+2.0	ppb	after 30 days
Yearly	-0.4	—	+0.4	ppb	
10 years	-2.0	—	+2.0	ppm	
Voltage	-5	—	+5	ppb	$\pm 5\%$ Change
Load	-10	—	+10	ppb	$\pm 10\%$ Change
Warm-up	-0.1	—	+0.1	ppm	In 5 minutes @ +25°C, referenced to 1 hour
Phase Noise @ 20 MHz	—	-98	-92	dBc/Hz	@ 10 Hz
	—	-126	-120		@ 100 Hz
	—	-145	-140		@ 1 kHz
	—	-152	-150		@ 10 kHz
Electrical Frequency Adjustment	—	—	—	—	
Range	—	—	-5.0	ppm	VCO@ 0V VCO@ 3.3V
Control	0	1.65	3.3	V	
Slope	—	Positive	—	—	
Input impedance	100	—	—	Kohm	
Input Power Voltage	3.135	3.3	3.465	V	5.0V input voltage is available. Please contact us for detail information.
Current	—	500	600	mA	@ turn on
Steady state	—	0.5	0.6	W	@ +25°C

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppb	± 10	± 20	± 30	± 50
-20 ~ +70		△	○	○	○
-40 ~ +85		X	△	○	○

* ○: Available △: Conditional X: Not available

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