

NK Type

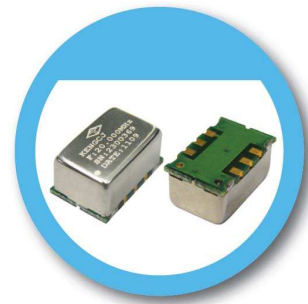
14.3 x 9.3 mm Oven Controlled Crystal Oscillator

FEATURE

- Dimension 14.3 x 9.3 x 6.5 mm typical.
- Stratum 3 (Overall ± 4.6 ppm including 10 years aging.)

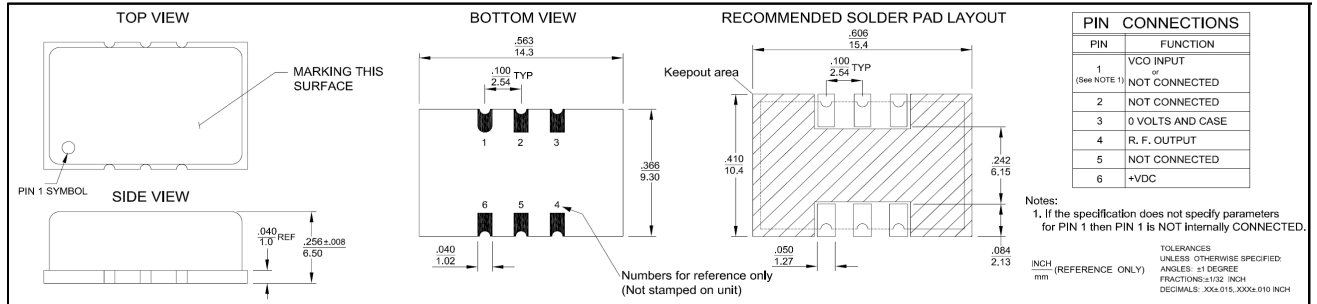
TYPICAL APPLICATION

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



RoHS Compliant Standard

DIMENSION



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, 15.36, 19.2, 20, 25 and 38.88MHz.
Wave Form		Rectangular			Sine wave output is available. Consult factory for more information
Level		HCMOS			
"1" Level	2.8			V	
"0" Level			0.4		
Load		15		pF	
Duty cycle	45	50	55	%	@ +1.65 V
Spurious			-60	dBc	
Frequency Stability					
Ambient	-0.1		+0.1	ppm	-40 °C to +85 °C, referenced to +25 °C. Refer to Freq. Stability Vs Temp. Range table..
Aging	-5.0		+5.0	ppb	Per day, at time of shipment
Daily	-5.0		+5.0	ppb	after 30 days
Yearly	-1.0		+1.0	ppm	
10 years	-4.0		+4.0	ppm	
Voltage	-20		+20	ppb	$\pm 5\%$ Change
Warm-up	-0.1		+0.1	ppm	In 5 minutes @ +25 °C, referenced to 1 hour
Phase Noise			-90		@ 10Hz
			-115		@ 100Hz
			-135		@ 1KHz
			-145		@ 10KHz
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			500	mA	@ turn on
Steady state		0.4	0.6	W	@ +25 °C

Packing: Tape & Reel, 500pcs per Reel.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppb	± 50	± 100	± 200
0 ~ +70		O	O	O
-30 ~ +70		Δ	O	O
-40 ~ +85		Δ	O	O

* O: Available Δ : Conditional X: Not available