

NK Type Oven Controlled Crystal Oscillator

RoHS Compliant Optional

FEATURE

1. Typical 20.0 x 20.0 x 15.0 mm.
2. Low Profile and SMD Case.
3. Stratum 3E Performance CDMA, WCDMA and GPS Applications.



ORDERING INFORMATION

N	K	I	D	E	T	G			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:20 W:20 H:15	A:12 I:9 T:5	D: ±1 E: ±5	E: ±30 F: ±40 G: ±50 J: ±80 H: ±100	B: 0~+50 E: 0~+70 C: -20~+70 D: -30~+70 T: -40~+70		50±5%	50±10%	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
						TTL 15pF	A	B					
						TTL 50pF	E	R					
						CMOS 15pF	J	K					
						CMOS 50pF	F	G					
						SINE WAVE	W						

Ordering example: NKIDETGTNL-26.000000 MHz

VCC: 9V, Frequency Stability: ±30ppb, -40°C to +70°C. Load: CMOS 50pF, Symmetry: 50±10%. AT-3rd Overtone, Laser Marking, Freq. 26.000000MHz

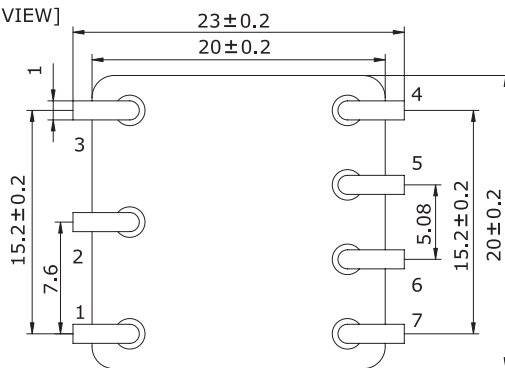
FREQ. STABILITY vs. TEMP. RANGE {O:AT O:SC}

Temp.(°C)	PPB	C: ±20	D: ±25	E: ±30	F: ±40	G: ±50	J: ±80	H: ±100
B 0 ~ +50		X	X	△	X	X	X	X
E 0 ~ +70		X	X	△	X	X	X	X
C -20 ~ +70		X	X	△	X	X	X	X
D -30 ~ +70		X	X	X	△	X	X	X
T -40 ~ +70		X	X	X	△	X	X	X

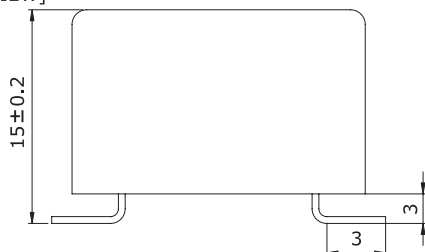
○:Standard △:Available (case by case) ✕:Not available

OUTLINE DRAWING

[BOTTOM VIEW]



[SIDE VIEW]



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

MARK:

KIOETG
26.000000MHz
0145

ELECTRICAL SPECIFICATION

	Min	Nominal	Max	Note	Unit	
NOMINAL FREQUENCY		26			MHz	
TEMPERATURE RANGE						
Operating	-40		70		°C	
Storage	-55		100		°C	
POWER SUPPLY	8.1	9	9.9	Vcc±10%	V	
CURRENT CONSUMPTION						
At switch on			400		mA	
At steady state@25°C			130		mA	
FREQUENCY ADJUSTMENT						
Control voltage range	0	2.5	5		V	
Pulling range	-2.5		2.5		±ppm	
Linearity		5			%	
Slope		Positive				
Reference voltage	4.0	5.0	6.0		V	
OUTPUT SIGNAL WAVEFORM				Square HCMOS		
Level	0.5		4.5		V	
Duty cycle	40		60		%	
Rise time / Fall time		10			ns	
Load		50		10KΩ//50pF±5%	pF	
Spurious			-65		dBc	
Harmonics					dBc	
FREQUENCY STABILITY						
Vs temperature range		40		Vcc ±5%	±ppb	
Vs power supply		10		Ca ±5%	±ppb	
Vs load		10		Warm up time 5 minutes	±ppb	
Vs warm up time at 25°C		50		Reference to freq at 1hour	±ppb	
AGING	1 day	1 year	10 years	After 30 Days of Operation		
Medium/long term stability	0.003	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
		-95	-115	-135	-140	
						dBc/Hz

Available Frequency Range: 10MHz to50MHz Including 13.0, 16.384 , 19.44 , 26.0 , 32.768 , 38.88 MHz

Available Options: AT cut Crystal, Different Input Voltage, Wide Electrical Adjustment, Fast Warm Up.