

Clock Oscillators Surface Mount Type

KC3225A-C2 Series



CMOS/ 2.5V/ 3.2x2.5mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{CC} = 2.5V$
Lower voltage available
- $\pm 25 \times 10^{-6}$ available

Table 1

Freq. Tol. Code	Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
F	± 100	-40 to +85	With only certain frequencies
G	± 50		
6	± 50		

How to Order

KC3225A 25.0000 C 2 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (2.5V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function (45/ 55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 2000 pcs./ reel)

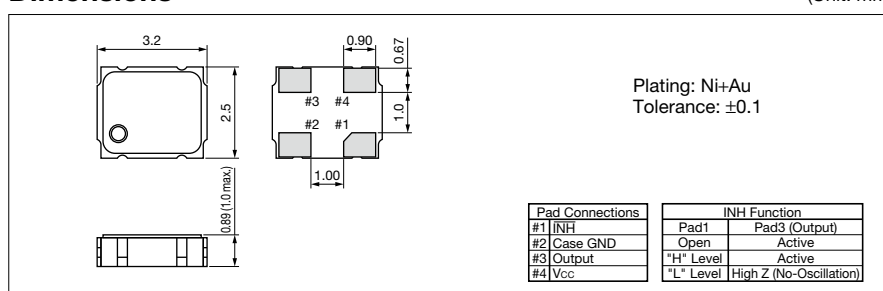
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f_o		1.5	125	MHz	
Frequency Tolerance	f_{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: -40 to +85°C	-100	+100	$\times 10^{-6}$
			Op. Temp.: -10 to +70°C/ -40 to +85°C/ -40 to +105°C	-50	+50	
			Op. Temp.: -10 to +70°C	-30	+30	
			Op. Temp.: -10 to +70°C	-25	+25	
Storage Temperature Range	T_{stg}		-55	+125	°C	
Operating Temperature Range	T_{use}	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+105		
Max. Supply Voltage	—		-0.5	+7.0	V	
Supply Voltage	V_{CC}	Freq. Tol.Code: 0, S, F	+2.25	+2.75	V	
		Freq. Tol.Code: U, G, 6	+2.38	+2.62		
Current Consumption (Maximum Loaded)	I_{CC}	$1.5 < f_o \leq 26\text{MHz}$	—	4	mA	
		$26 < f_o \leq 50\text{MHz}$	—	6		
		$50 < f_o \leq 67.5\text{MHz}$	—	9		
		$67.5 < f_o \leq 95\text{MHz}$	—	14		
		$95 < f_o \leq 125\text{MHz}$	—	18		
Stand-by Current	I_{std}		—	10	μA	
Symmetry	SYM	@50% V_{CC}	45	55	%	
Rise/ Fall Time (10% V_{CC} to 90% V_{CC} Maximum Loaded)	tr/ tf	$1.5 < f_o \leq 67.5\text{MHz}$	—	6	ns	
		$67.5 < f_o \leq 125\text{MHz}$	—	4		
Low Level Output Voltage	V_{OL}	$I_{OL} = 4\text{mA}$	—	10% V_{CC}	V	
High Level Output Voltage	V_{OH}	$I_{OH} = -4\text{mA}$	90% V_{CC}	—	V	
CMOS Load	L_{CMOS}	CMOS Output	—	15	pF	
Input Voltage Range	V_{IN}		0	V_{CC}	V	
Low Level Input Voltage	V_{IL}		—	30% V_{CC}	V	
High Level Input Voltage	V_{IH}		70% V_{CC}	—	V	
Disable Time	t_{dis}		—	150	ns	
Enable Time	t_{ena}		—	5	ms	
Start-up Time	t_{str}	@Minimum operating voltage to be 0 sec.	—	10	ms	
1 Sigma Jitter	J_{Sigma}	Measured with Wavcrest SIA-3000	$1.5 < f_o \leq 60\text{MHz}$	—	8	ps
			$60 < f_o \leq 125\text{MHz}$	—	5	
Peak to Peak Jitter	J_{PK-PK}	Measured with Wavcrest SIA-3000	$1.5 < f_o \leq 60\text{MHz}$	—	80	ps
			$60 < f_o \leq 125\text{MHz}$	—	40	

Note: All electrical characteristics are defined at the maximum load and operating temperature range.
 Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

