



Clock Oscillators Surface Mount Type

KC3225A-C3 Series



CMOS/ 3.3V/ 3.2×2.5mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{CC} = 3.3V$
- $\pm 25 \times 10^{-6}$ available

Table 1

Freq. Tol.		Operating Temperature Range (°C)	Note
Code	$\times 10^{-6}$		
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
F	± 100	-40 to +85	Please contact us for available frequencies.
G	± 50		
6	± 50	-40 to +105	

How to Order

KC3225A 25.0000 C 3 ☐ E 00

- ① Series
 ② Output Frequency
 ③ Output Type (CMOS)
 ④ Supply Voltage (3.3V)
 ⑤ Frequency Tolerance (See Table 1)
 ⑥ Symmetry/ INH Function (45/ 55%, Stand-by)
 ⑦ Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 2000 pcs./ reel)

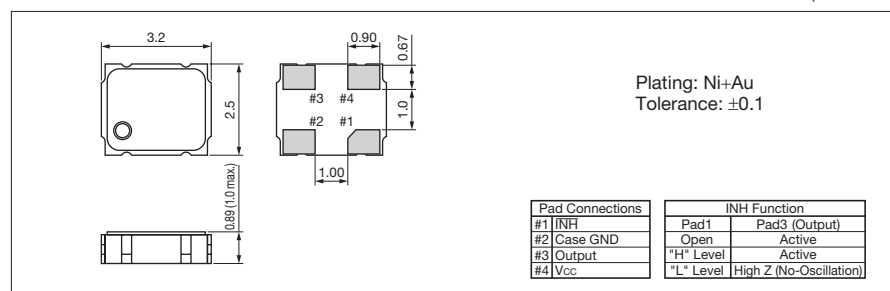
Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	fo		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
			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	+85	
			-40	+105	
Max. Supply Voltage	—		-0.5	+7.0	V
Supply Voltage	V _{CC}	Freq. Tol.Code: 0, S, F	+2.97	+3.63	V
		Freq. Tol.Code: U, G, 6	+3.14	+3.46	
Current Consumption (Maximum Loaded)	I _{CC}	1.5≤fo≤26MHz	—	6	mA
		26<fo≤50MHz	—	8	
		50<fo≤67.5MHz	—	12	
		67.5<fo≤95MHz	—	20	
		95<fo≤125MHz	—	25	
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≤fo≤67.5MHz	—	5	ns
		67.5<fo≤125MHz	—	3	
Low Level Output Voltage	V _{OL}	I _{OL} = 4mA	—	10% V _{CC}	V
High Level Output Voltage	V _{OH}	I _{OH} = -4mA	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 Wavecrest SIA-3000	1.5≤fo≤60MHz	—	8
			60<fo≤125MHz	—	5
Peak to Peak Jitter	J _{PK-PK}	Measured with Wavecrest SIA-3000	1.5≤fo≤60MHz	—	80
			60<fo≤125MHz	—	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)

