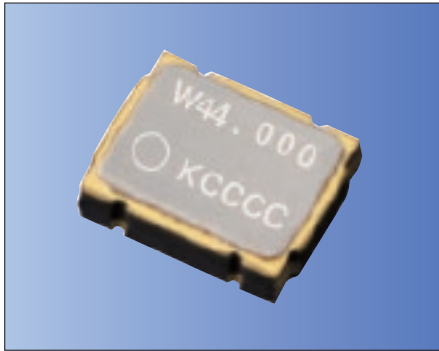


Clock Oscillators Surface Mount Type KC3225A-C3 Series (K25-3C Series)



CMOS/ 3.3V/ 3.2x2.5mm



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. 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		

How to Order

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

- ① Type (3.2x2.5mm SMD)
- 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 Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 2000 pcs./ reel)

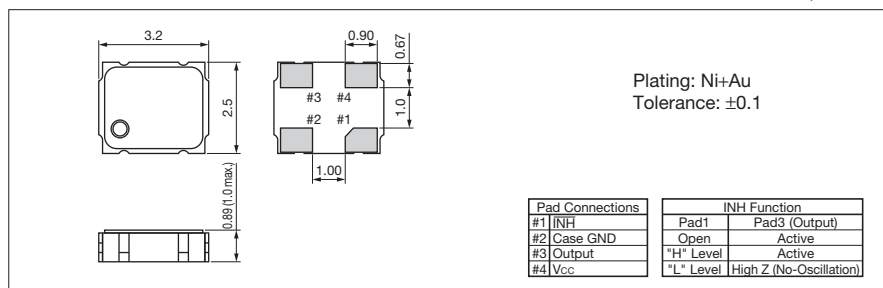
Specifications

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	$\times 10^{-6}$
			Op. Temp.: -10 to +70°C/ -40 to +85°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		
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	+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	ps
			60 < fo ≤ 125MHz	—	5	
Peak to Peak Jitter	J _{PK-PK}	Measured with Wavecrest SIA-3000	1.5 ≤ fo ≤ 60MHz	—	80	ps
			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)

