

Clock Oscillators Surface Mount Type

KC3225A-C3 Series (K25-3C 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. Code	$\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		With only certain frequencies
U	± 25		
F	± 100		
G	± 50	-40 to +85	

How to Order

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

- ① Type (3.2×2.5mm 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

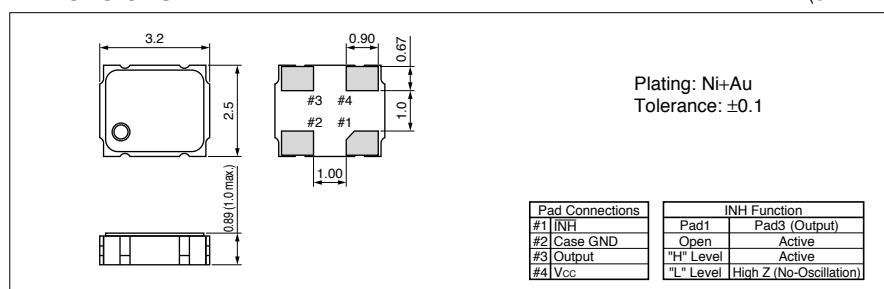
Item	Symbol	Conditions		Min.	Max.	Units
Output Frequency Range	fo			1.5	125	MHz
Frequency Tolerance	f_tol	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: -40 to +85°C	-100	+100	×10 ⁻⁶
			Op. Temp.: -10 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	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 DTS-2079 V/Sl 6.3.1	1.5≤fo≤60MHz	—	8	ps
			60<fo≤125MHz	—	5	ps
Peak to Peak Jitter	J _{PK-PK}		1.5≤fo≤60MHz	—	80	ps
			60<fo≤125MHz	—	40	ps

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)

