

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	$\pm 50$	-10 to +70	Standard specifications
S	$\pm 30$		
U	$\pm 25$		
F	$\pm 100$	-40 to +85	With only certain frequencies
G	$\pm 50$		

### 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)

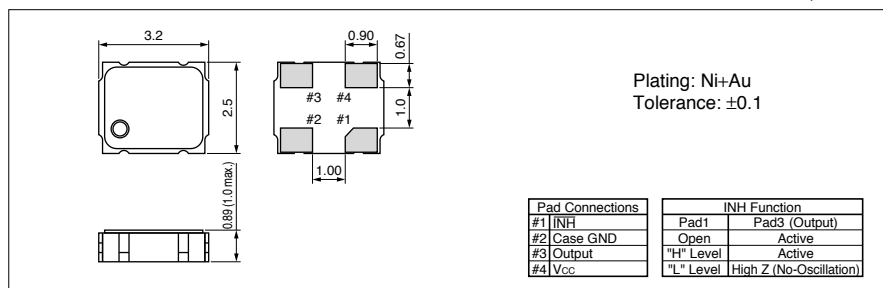
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	fo		1.5	125	MHz	
Frequency Tolerance	f <sub>tol</sub>	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 <sub>stg</sub>		-55	+125	°C	
Operating Temperature Range	T <sub>use</sub>	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—		-0.5	+7	V	
Supply Voltage	V <sub>CC</sub>	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 <sub>CC</sub>	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 <sub>std</sub>		—	10	μA	
Symmetry	SYM	@50% V <sub>CC</sub>	45	55	%	
Rise/ Fall Time (10% V <sub>CC</sub> to 90% V <sub>CC</sub> Maximum Loaded)	tr/ tf	1.5<fo≤67.5MHz	—	5	ns	
		67.5<fo≤125MHz	—	3		
Low Level Output Voltage	V <sub>OL</sub>	I <sub>OL</sub> =4mA	—	10% V <sub>CC</sub>	V	
High Level Output Voltage	V <sub>OH</sub>	I <sub>OH</sub> =-4mA	90% V <sub>CC</sub>	—	V	
CMOS Load	L <sub>CMOS</sub>	CMOS Output	—	15	pF	
Input Voltage Range	V <sub>IN</sub>		0	V <sub>CC</sub>	V	
Low Level Input Voltage	V <sub>IL</sub>		—	30% V <sub>CC</sub>	V	
High Level Input Voltage	V <sub>IH</sub>		70% V <sub>CC</sub>	—	V	
Disable Time	t <sub>dis</sub>		—	150	ns	
Enable Time	t <sub>ena</sub>		—	5	ms	
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	—	10	ms	
1 Sigma Jitter	J <sub>Sigma</sub>	Measured with Wavecrest DTS-2079 V/Sl 6.3.1	1.5<fo≤60MHz	—	8	ps
			60<fo≤125MHz	—	5	ps
			1.5<fo≤60MHz	—	80	ps
Peak to Peak Jitter	J <sub>PK-PK</sub>		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)

