

RoHS Compliant

**Features**

- Wide operating voltage range 2.5 to 3.3V
- $\pm 25 \times 10^{-6}$  available
- Highly reliable with seam welding
- Miniature ceramic package
- CMOS output

**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	$\pm 50$		
6	$\pm 50$	-40 to +105	

**How to Order**

KC5032A 150.000 C 2 0 E 00  
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (5.0×3.2mm SMD)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (2.5V, 3.3V Compatible)
- 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 1000 pcs./ reel)

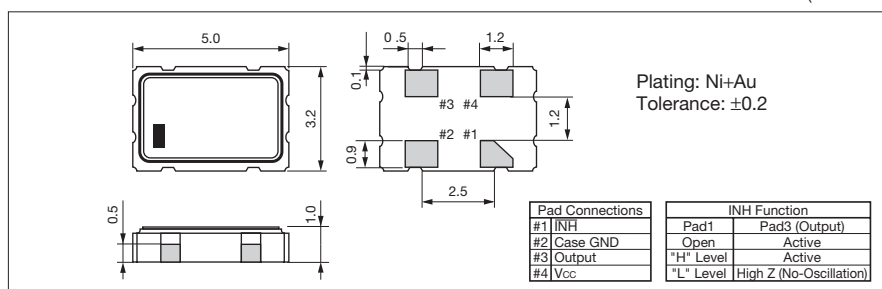
**Specifications**

Item	Symbol	Conditions	Min.	Max.	Units		
Output Frequency Range	fo	fo>135MHz	135	170	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/ -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 <sub>stg</sub>		-55	+125	°C		
Operating Temperature Range	T <sub>use</sub>		-40	+105	°C		
Max. Supply Voltage	—		-0.3	+4.0	V		
Supply Voltage	V <sub>cc</sub>		+2.25	+3.63	V		
Current Consumption (Loaded) (2.25<V <sub>cc</sub> ≤2.8V)	I <sub>cc</sub>	135<fo≤150MHz	—	19	mA		
Current Consumption (Loaded) (2.8<V <sub>cc</sub> ≤3.63V)		150<fo≤170MHz	—	23			
Stand-by Current		I <sub>std</sub>		—		10	$\mu$ A
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	2.25≤V <sub>cc</sub> ≤2.8V 2.8<V <sub>cc</sub> ≤3.63V	—	3.0 2.5	ns		
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		
Output Load	L <sub>CMOS</sub>	2.25≤V <sub>cc</sub> ≤3.63V	—	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 SIA-3000	—	4	ps		
Peak to Peak Jitter	J <sub>PK-PK</sub>		—	30	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)

