



RoHS Compliant

### Features

- Wide operating voltage range 1.6 to 5.5V
- $\pm 25 \times 10^{-6}$  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
S	$\pm 50$		

### How to Order

KC5032A 25.0000 C M 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 (1.8V, 2.5V, 3.3V, 5V 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)

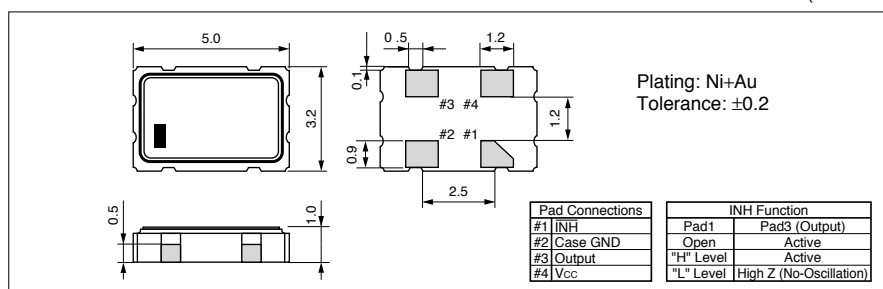
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	$f_o$		1.789	50	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	$T_{use}$		-40	+85	°C	
Max. Supply Voltage	—		-0.5	+6.5	V	
Supply Voltage	$V_{CC}$		+1.6	+5.5	V	
Current Consumption	$I_{CC}$	$1.6 \leq V_{CC} \leq 2V$	—	5	mA	
		$2 < V_{CC} \leq 2.8V$	—	6		
		$2.8 < V_{CC} \leq 3.63V$	—	7		
		$4.5 \leq V_{CC} \leq 5.5V$	—	9.5		
Stand-by Current	$I_{std}$		—	10	$\mu A$	
Symmetry	SYM	@50% $V_{CC}$	45	55	%	
Rise/ Fall Time (10% $V_{CC}$ to 90% $V_{CC}$ Maximum Loaded)	$t_r / t_f$	$1.6 \leq V_{CC} \leq 2V$	—	8	ns	
		$2 < V_{CC} \leq 2.8V$	—	7		
		$2.8 < V_{CC} \leq 3.63V$	—	6		
		$4.5 \leq V_{CC} \leq 5.5V$	—	5		
Low Level Output Voltage	$V_{OL}$		—	10% $V_{CC}$	V	
High Level Output Voltage	$V_{OH}$		90% $V_{CC}$	—	V	
Output Load	$L_{CMOS}$	$1.6 \leq V_{CC} \leq 3.63V$	—	15	pF	
		$4.5 \leq V_{CC} \leq 5.5V$	—	50		
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 VISI/ 6.3.1	—	8	ps	
Peak to Peak Jitter	$J_{PK-PK}$		—	80	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)

