

Clock Oscillators Surface Mount Type KC5032A-C1 Series (High Frequency)



CMOS/ 1.8V, 2.5V, 3.3V/ 5.0×3.2mm



RoHS Compliant

Features

- Wide operating voltage range 1.6 to 3.3V
- $\pm 25 \times 10^{-6}$ available
- Highly reliable with seam welding
- Miniature ceramic package
- CMOS output

Table 1

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

How to Order

KC5032A 100.000 C 1 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 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

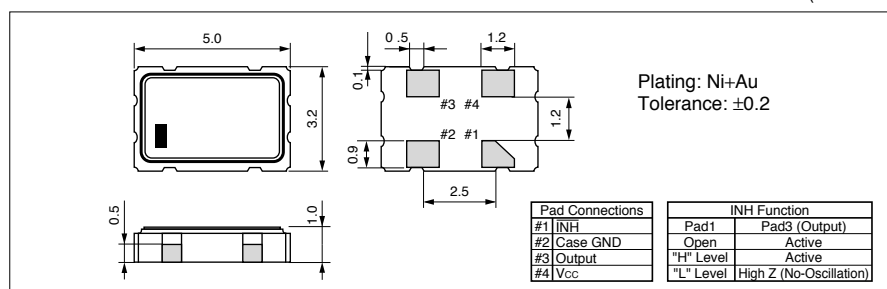
Item	Symbol	Conditions		Min.	Max.	Units
Output Frequency Range	fo			50	133	MHz
Frequency Tolerance	f_tol	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: -40 to +85°C	-100	+100	×10 ⁻⁶
			Op. Temp.: -10 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			-40	+85	°C
Max. Supply Voltage	—			-0.3	+4	V
Supply Voltage	V _{CC}			+1.6	+3.63	V
Current Consumption	I _{CC}	1.6≤V _{CC} ≤2V		—	18	mA
		2<V _{CC} ≤2.8V		—	20	
		2.8<V _{CC} ≤3.63V		—	30	
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	1.6≤V _{CC} ≤2V		—	4.5	ns
		2<V _{CC} ≤2.8V		—	3	
		2.8<V _{CC} ≤3.63V		—	2.5	
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≤V _{CC} ≤3.63V		—	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 VISI 6.3.1	50≤fo≤100MHz	—	5	ps
			100<fo≤133MHz	—	4	
Peak to Peak Jitter	J _{PK-PK}		50≤fo≤100MHz	—	40	ps
			100<fo≤133MHz	—	30	

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)

