

Clock Oscillators Surface Mount Type

KC5032A-C5 Series



CMOS/ 5.0V/ 5.0x3.2mm



RoHS Compliant

Features

- ±25×10⁻⁶ available
- Highly reliable with seam welding
- Miniature ceramic package
- CMOS output
- Supply voltage V_{cc} = 5.0V

Table 1

Freq. Tol. Code	× 10 ⁻⁶	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
F	±100	-40 to +85	With only certain frequencies
G	± 50		
6	± 50	-40 to +105	

How to Order

KC5032A 25.0000 C 5 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (5V)
- 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)

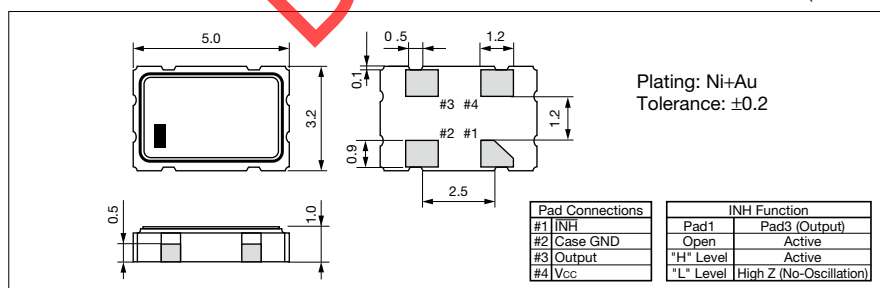
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f _o		1.8	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	×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 _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}		-40	+105	°C	
Max. Supply Voltage	—		0.6	+6.5	V	
Supply Voltage	V _{cc}		+4.5	+5.5	V	
Current Consumption (Loaded)	I _{cc}	1.8≤f _o ≤20MHz	—	12	mA	
		20<f _o ≤40MHz	—	17		
		40<f _o ≤50MHz	—	20		
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	1.8≤f _o ≤26MHz	—	10	ns	
		26<f _o ≤50MHz	—	8		
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	
Output Load	L _{CMOS}		—	50	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 SIA-3000	1.8≤f _o ≤40MHz	—	8	ps
			40<f _o ≤50MHz	—	5	
Peak to Peak Jitter	J _{PK.PK}	Measured with Wavecrest SIA-3000	1.8≤f _o ≤40MHz	—	80	ps
			40<f _o ≤50MHz	—	50	

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)

