



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{CC}=3.3V$
- $\pm 25 \times 10^{-6}$, $\pm 20 \times 10^{-6}$ available

Table 1

Freq. Tol. Code	Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
O	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
W	± 20	-40 to +85	With only certain frequencies
F	± 100		
G	± 50		

How to Order

KC5032C 25.0000 C 3 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 (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")

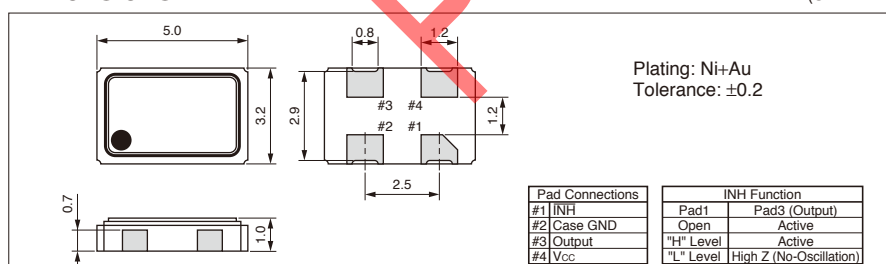
Packaging (Tape & Reel 1000 pcs./reel)

Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f_o		1.8	170	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	
		Standard Specifications	-10	+70		
Operating Temperature Range	T_{use}	Standard Specifications	-40	+85	°C	
		Extend (Option)	-0.5	+7		
Max. Supply Voltage	—		-0.5	+7	V	
Supply Voltage	V_{CC}	Freq. Tol.Code: O, S, F	2.97	3.63	V	
		Freq. Tol.Code: U, G	3.14	3.46		
		Freq. Tol.Code: W	3.20	3.40		
Current Consumption (Maximum Loaded)	I_{CC}	1.8< f_o <20MHz	—	10	mA	
		20< f_o <40MHz	—	15		
		40< f_o <60MHz	—	30		
		60< f_o <100MHz	—	35		
		100< f_o <135MHz	—	45		
Stand-by Current	I_{std}	1.8< f_o <135MHz	—	10	μA	
		135< f_o <170MHz	—	150		
Symmetry	SYM	@50% V_{CC}	45	55	%	
Rise/ Fall Time (10% V_{CC} to 90% V_{CC} Maximum Loaded)	t_r / t_f	1.8< f_o <26MHz	—	10	ns	
		26< f_o <45MHz	—	8		
		45< f_o <100MHz	—	5		
		100< f_o <170MHz	—	2.5		
Low Level Output Voltage	V_{OL}	$I_{OL}=-8mA$	—	10% V_{CC}	V	
High Level Output Voltage	V_{OH}	$I_{OH}=-8mA$	90% V_{CC}	—	V	
CMOS Load	L_{CMOS}	CMOS Output	—	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 VSI 6.3.1	1.8< f_o <40MHz	—	8	ps
			40< f_o <100MHz	—	5	ps
			100< f_o <170MHz	—	4	ps
Peak to Peak Jitter	J_{PK-PK}	Measured with Wavecrest DTS-2079 VSI 6.3.1	1.8< f_o <40MHz	—	80	ps
			40< f_o <100MHz	—	40	ps
			100< f_o <170MHz	—	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



Recommended Land Pattern

