



CMOS/ 3.3V/ 7.0×5.0mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage Vcc=3.3V
- ±25×10⁻⁶, ±20×10⁻⁶ available

Table 1

Stability Code	× 10 ⁻⁶	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
W	± 20		
F	±100	-40 to +85	Please contact us for available frequencies.
G	± 50		
6	± 50	-40 to +105	

How to Order

KC7050A **25.0000** **C** **3** **□** **E** **00**
 ① ② ③ ④ ⑤ ⑥ ⑦

- ①Series
- ②Output Frequency
- ③Output Type (CMOS)
- ④Supply Voltage (3.3V)
- ⑤Frequency Tolerance (See Table 1)
- ⑥Symmetry/ INH Function (45/ 55%)
- ⑦Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

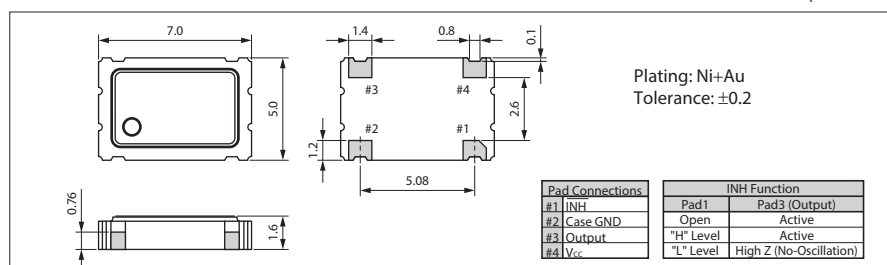
Specifications

Item	Symbol	Conditions	Min.	Max.	Unit	
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	Temp.: -40 to +85°C	-100	+100	× 10 ⁻⁶
			Temp.: -10 to +70°C/ -40 to +85°C/ -40 to +105°C	-50	+50	
			Temp.: -10 to +70°C	-30	+30	
			Temp.: -10 to +70°C	-25	+25	
Storage Temperature Range	T _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—	f _o < 135MHz	-0.5	+7.0	V	
		f _o ≥ 135MHz	-0.5	+5.0		
Supply Voltage	V _{cc}	Freq. Tol. Code: 0, S, F	+2.97	+3.63	V	
		Freq. Tol. Code: U, G, 6	+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}		—	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 ≤ 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 Wavcrest SIA-3000	1.8 ≤ f _o < 40MHz	—	8	ps
			40 ≤ f _o ≤ 100MHz	—	5	
			100 < f _o ≤ 170MHz	—	4	
Peak to Peak Jitter	J _{PK-PK}	Measured with Wavcrest SIA-3000	1.8 ≤ f _o < 40MHz	—	80	ps
			40 ≤ f _o ≤ 100MHz	—	40	
			100 < f _o ≤ 170MHz	—	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)

