

Clock Oscillators Surface Mount Type

KC7050A-C1 Series



CMOS/ 1.8V/ 7.0x5.0mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{CC} = 1.8V$
Lower voltage available
- $\pm 25 \times 10^{-6}$, $\pm 20 \times 10^{-6}$ available

Table 1

Stability Code	$\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
W	± 20	-40 to +85	With only certain frequencies
F	± 100		
G	± 50		
6	± 50	-40 to +105	

How to Order

KC7050A 25.0000 C 1 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (1.8V)
- 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)

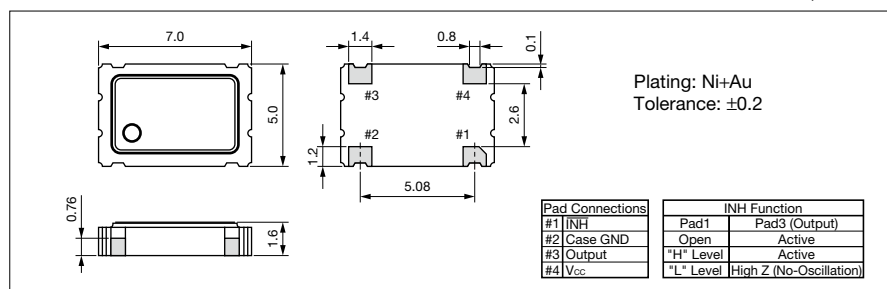
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	fo		1.8	39.99	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 / -40 to +105°C	-50	+50	
			Op. Temp.: -10 to +70°C	-30	+30	
			Op. Temp.: -10 to +70°C	-25	+25	
			Op. Temp.: -10 to +70°C	-20	+20	
Storage Temperature Range	T _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+105		
Max. Supply Voltage	-		-0.5	+3.6	V	
Supply Voltage	V _{CC}	Freq. Tol.Code: 0, S, F	+1.71	+1.89	V	
		Freq. Tol.Code: U, G, W, 6	+1.75	+1.85		
Current Consumption (Maximum Loaded)	I _{CC}	1.8 ≤ fo ≤ 25MHz	-	3	mA	
		25 < fo ≤ 39.99MHz	-	4		
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		-	9	ns	
Low Level Output Voltage	V _{OL}	I _{OL} = 2.8mA	-	10% V _{CC}	V	
High Level Output Voltage	V _{OH}	I _{OH} = -2.8mA	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	-	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)

