



Clock Oscillators Surface Mount Type KC7050A-C1 Series (K53-1C Series)

CMOS / 1.8V / 7.0×5.0mm



Pb Free

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{DD} = 1.8V$
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		
F	± 100	-40 to +85	With only certain frequencies
G	± 50		

How to Order

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

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (1.8V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/Enable Function (45/55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000pcs./reel)

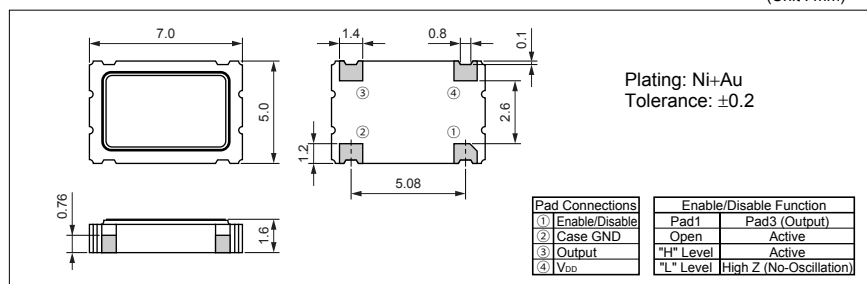
Specifications

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 (1year @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/ -40 to +85°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	+85	
Max. Supply Voltage	—			-0.5	+3.6	V
Supply Voltage	V _{DD}	Freq. Tol.Code: 0, S, F		1.71	1.89	V
		Freq. Tol.Code: U, G, W		1.75	1.85	
Current Consumption (Maximum Loaded)	I _{DD}	1.8≤Fo≤25MHz		—	3	mA
		25<Fo≤39.99MHz		—	4	
Stand-by Current	I_std			—	10	μA
Symmetry	SYM	@50% V _{DD}		45	55	%
Rise/ Fall Time (10% V _{DD} to 90% V _{DD} Maximum Loaded)	Tr/Tf			—	9	nS
Output Voltage-"L"	V _{OL}	IoL=2.8mA		—	10% V _{DD}	V
Output Voltage-"H"	V _{OH}	IoH=-2.8mA		90% V _{DD}	—	V
Output Load	L_CMOS	CMOS Output		—	15	pF
Input Voltage Range	V _{IN}			0	V _{DD}	V
Input Voltage-"L"	V _{IL}			—	30% V _{DD}	V
Input Voltage-"H"	V _{IH}			70% V _{DD}	—	V
Disable Time	—			—	150	nS
Enable Time	—			—	5	mS
Start-up Time	ST	@ Minimum Operation Voltage to be 0 sec.		—	10	mS

Note: All electrical characteristics are defined at the maximum load and operating temperature range.
Please contact us for inquiries about operating temperature range, available frequencies and other conditions.

Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)

