



Pb Free

RoHS Compliant

Features

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

Table 1

Freq. Tol. Code	Tol. $\times 10^{-6}$	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		

How to Order

KC7050P 125.000 L 3 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (LVDS)
- ④ Supply Voltage (3.3V)
- 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)

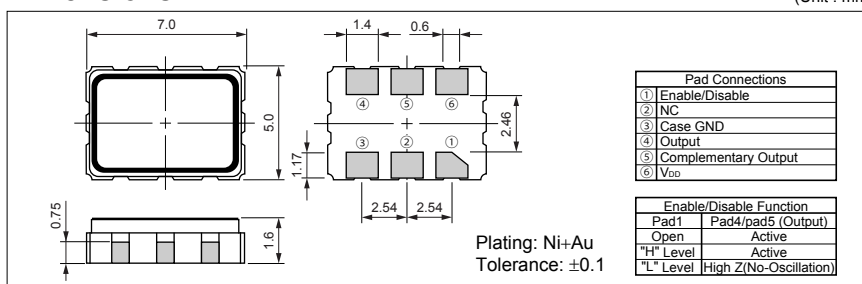
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	Fo		75	170	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	$\times 10^{-6}$
			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	
Storage Temperature Range	T _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	0	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V _{DD}	Freq. Tol. Code: 0, S, F	2.97	3.63	V	
		Freq. Tol. Code: U, G	3.14	3.46		
Current Consumption	I _{DD}		—	70	mA	
Stand-by Current	I _{std}		—	30	μA	
Symmetry	SYM	100 ohm @50% Output Swing	45	55	%	
Rise/Fall Time (20% V _{CC} to 80% V _{CC})	Tr/Tf	100 ohm	—	0.6	nS	
Output Voltage-"L"	V _{OL}	Typ. 1.1V	0.9	—	V	
Output Voltage-"H"	V _{OH}	Typ. 1.43V	—	1.6	V	
Differential Output Voltage	V _{OD}	Typ. 330mV	247	454	mV	
Differential Output Voltage Error	dV _{OD}	dV _{OD} = V _{OD1} -V _{OD2}	—	50	mV	
Offset Voltage	V _{OS}	Typ. 1.25V	1.125	1.375	V	
Offset Voltage Error	dV _{OS}	dV _{OS} = V _{OS1} -V _{OS2}	—	50	mV	
Output Load	L _{LVDS}	LVDS Output	100		ohm	
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	—		—	200	nS	
Enable Time	—		—	5	mS	
Start-up Time	ST	@Minimum Operation Voltage to be 0 sec.	—	10	mS	
Deterministic Jitter (DJ)	DJ		—	2	pS	
1Sigma jitter	1sigma	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	—	4	pS	
Peak to Peak Jitter	Pk-Pk		—	30	pS	

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)

