



LVDS/ 3.3V or 2.5V/ 7.0×5.0mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- LVDS output
- Supply voltage $V_{CC}=3.3V, 2.5V$
- $\pm 25 \times 10^{-6}$ available
- Low Phase Noise

Table 1

Code	Freq. Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
S	± 30	-40 to +85	Please contact us for available frequencies.
U	± 25		
F	± 100	-40 to +105	
G	± 50		
6	± 50		

How to Order

KC7050P 125.000 L □ □ J 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (LVDS)
- ④ Supply Voltage (3 : 3.3V or 2 : 2.5V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function
J : 45/ 55%
- ⑦ Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

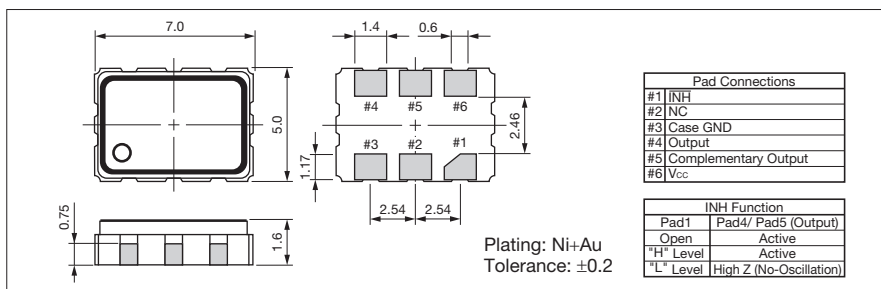
Specifications

Item	Symbol	Conditions	Specifications		Units
			KC7050P-L2	KC7050P-L3	
Output Frequency Range ^{Note1}	f_o		25 to 175		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	$\pm 50/ -40$ to +105°C		$\times 10^{-6}$
			$\pm 100/ -40$ to +85°C		
			$\pm 50/ -40$ to +85°C		
			$\pm 50/ 0$ to +70°C		
			$\pm 30/ 0$ to +70°C		
Storage Temperature Range	T_{stg}		-55 to +125		°C
Operating Temperature Range	T_{use}	Standard Specifications	0 to +70/ -40 to +85		°C
		Extend (Option)	-40 to +105		
Max. Supply Voltage	—		-0.5 to +5.0		V
Supply Voltage	V_{CC}		+2.375 to +2.625	+2.97 to +3.63	V
Current Consumption	I_{CC}		50 max.		mA
Stand-by Current	I_{std}		20 max.		μA
Symmetry	SYM	100ohm @crossing point	50 \pm 5		%
Rise/ Fall Time (20% V_{CC} to 80% V_{CC} Maximum Loaded)	Tr/ Tf	100ohm	0.6 max.		ns
Low Level Output Voltage ^{Note2}	V_{OL}		0.9 min. Typ.:1.1		V
High Level Output Voltage ^{Note2}	V_{OH}		1.6 max. Typ.:1.43		V
Differential Output Voltage ^{Note2}	V_{OD}		247 to 454 Typ.:330		mV
Differential Output Voltage Error ^{Note2}	dV_{OD}	$dV_{OD} = V_{OD1} - V_{OD2} $	50 max.		mV
Offset Voltage	V_{OS}		1.125 to 1.375		V
Offset Voltage Error	dV_{OS}	$dV_{OS} = V_{OS1} - V_{OS2} $	50 max.		mV
Output Load	RL	LVDS Output	100		ohm
Input Voltage Range	V_{IN}		0 to V_{CC}		V
Low Level Input Voltage	V_{IL}		30% V_{CC} max.		V
High Level Input Voltage	V_{IH}		70% V_{CC} min.		V
Disable Time	t_{dis}		200 max.		ns
Enable Time	t_{ena}		10 max.		ms
Start-up Time	t_{str}	@Minimum operating voltage to be 0 sec.	10 max.		ms
Deterministic Jitter	DJ	Measured with Wavecrest SIA-3000	2 max.		ps
1 Sigma Jitter	J_{sigma}		4 max.		ps
Peak to Peak Jitter	J_{PK-PK}		30 max.		ps
Phase Jitter	J_{Phase}	@156.25MHz $V_{CC}=3.3V$	BW : 12kHz to 20MHz	0.3max.	ps

Note : All electrical characteristics are defined at the maximum load and operating temperature range.
Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions.
Note2: DC characteristic

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

