

# Clock Oscillators Surface Mount Type

## KC7050P-P3 Series



LV-PECL/ 3.3V/ 7.0x5.0mm



RoHS Compliant

### Features

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

Table 1

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

### How to Order

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

- ① Type (7.0x5.0mm SMD)
- ② Output Frequency
- ③ Output Type (LV-PECL)
- ④ Supply Voltage (3.3V)
- 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 <sup>Note1</sup>	fo		50	190	MHz	
Frequency Tolerance	f <sub>tol</sub>	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.: 0 to +70°C/ -40 to +85°C	-50	+50	
			Op. Temp.: 0 to +70°C	-30	+30	
			Op. Temp.: 0 to +70°C	-25	+25	
Storage Temperature Range	T <sub>stg</sub>		-55	+125	°C	
Operating Temperature Range	T <sub>use</sub>	Standard Specifications	0	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V <sub>CC</sub>	Freq. Tol.Code: 0, S, F	2.97	3.63	V	
		Freq. Tol.Code: U, G	3.14	3.46		
Current Consumption	I <sub>CC</sub>		—	90	mA	
Stand-by Current	I <sub>std</sub>		—	30	μA	
Symmetry	SYM	50ohm @50% Output Swing	45	55	%	
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	50ohm	—	0.6	nS	
Low Level Output Voltage <sup>Note2</sup>	V <sub>OL</sub>	Op. Temp.: 0 to +85°C/ Typ. 1.600V	V <sub>CC</sub> -1.810	V <sub>CC</sub> -1.620	V	
		Op. Temp.: -40 to 0°C/ Typ. 1.605V	V <sub>CC</sub> -1.830	V <sub>CC</sub> -1.555		
High Level Output Voltage <sup>Note2</sup>	V <sub>OH</sub>	Op. Temp.: 0 to +85°C/ Typ. 2.350V	V <sub>CC</sub> -1.025	V <sub>CC</sub> -0.880	V	
		Op. Temp.: -40 to 0°C/ Typ. 2.295V	V <sub>CC</sub> -1.085	V <sub>CC</sub> -0.900		
Output Load	RL	LV-PECL Output	50		ohm	
Input Voltage Range	V <sub>IN</sub>		0	V <sub>CC</sub>	V	
Low Level Input Voltage	V <sub>IL</sub>		—	30% V <sub>CC</sub>	V	
High Level Input Voltage	V <sub>IH</sub>		70% V <sub>CC</sub>	—	V	
Disable Time	t <sub>dis</sub>		—	150	nS	
Enable Time	t <sub>ena</sub>		—	10	mS	
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	—	10	mS	
Deterministic Jitter (DJ)	DJ		—	2	pS	
1 Sigma Jitter	J <sub>Sigma</sub>	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	—	4	pS	
Peak to Peak Jitter	J <sub>PK-PK</sub>		—	30	pS	

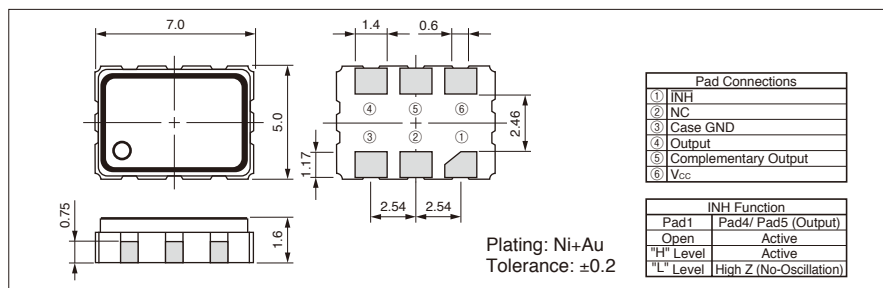
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

