



**Pb Free**

**RoHS Compliant**

### Features

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

**Table 1**

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

### How to Order

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

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (LV-PECL)
- 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)

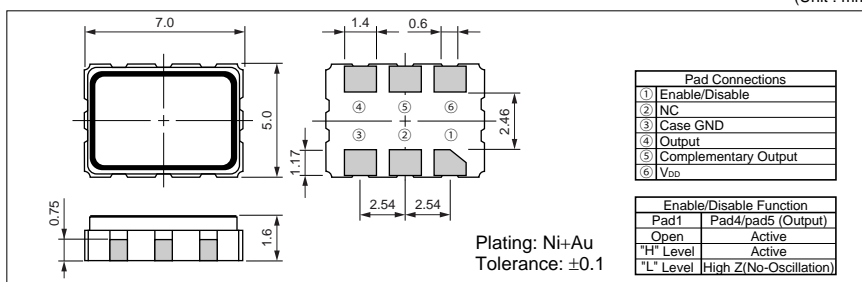
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	Fo		75	190	MHz	
Frequency Tolerance	F <sub>tol</sub>	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.: 0 to +70°C/ -40 to +85°C	-50	+50	
			Op. Temp.: 0 to +70°C/ -40 to +85°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>DD</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>DD</sub>		—	90	mA	
Stand-by Current	I <sub>std</sub>		—	30	μA	
Symmetry	SYM	50 ohm @50% Output Swing	45	55	%	
Rise/Fall Time (20% V <sub>CC</sub> to 80% V <sub>CC</sub> )	Tr/Tf	50 ohm	—	0.6	nS	
Output Voltage-"L"	V <sub>OL</sub>	Op. Temp.: 0 to +85°C/ Typ. 1.600V	V <sub>DD</sub> -1.810	V <sub>DD</sub> -1.620	V	
		Op. Temp.: -40 to 0°C/ Typ. 1.605V	V <sub>DD</sub> -1.830	V <sub>DD</sub> -1.555		
Output Voltage-"H"	V <sub>OH</sub>	Op. Temp.: 0 to +85°C/ Typ. 2.350V	V <sub>DD</sub> -1.025	V <sub>DD</sub> -0.880	V	
		Op. Temp.: -40 to 0°C/ Typ. 2.295V	V <sub>DD</sub> -1.085	V <sub>DD</sub> -0.900		
Output Load	L <sub>ECL</sub>	LV-PECL Output	50		ohm	
Input Voltage Range	V <sub>IN</sub>		0	V <sub>DD</sub>	V	
Input Voltage-"L"	V <sub>IL</sub>		—	30% V <sub>DD</sub>	V	
Input Voltage-"H"	V <sub>IH</sub>		70% V <sub>DD</sub>	—	V	
Disable Time	—		—	150	nS	
Enable Time	—		—	5	mS	
Start-up Time	ST	@Minimum Operation Voltage to be 0 sec.	—	10	mS	
Deterministic Jitter (DJ)	DJ	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	—	2	pS	
1Sigma jitter	1sigma		—	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)

