



LV-PECL/ 3.3V or 2.5V/ 7.0×5.0mm



RoHS Compliant

**Features**

- Miniature ceramic package
- Highly reliable with seam welding
- LV-PECL output
- Supply voltage Vcc=3.3V, 2.5V
- ±25×10<sup>-6</sup> available
- Low Phase Noise

**How to Order**

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

- ① Series
- ② Output Frequency
- ③ Output Type (LV-PECL)
- 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)

**Table 1**

Freq. Code	Tol. × 10 <sup>-6</sup>	Operating Temperature Range (°C)	Note
O	± 50	0 to +70	Standard specifications
S	± 30		
U	± 25	-40 to +85	Please contact us for available frequencies.
F	±100		
G	± 50		
6	± 50		

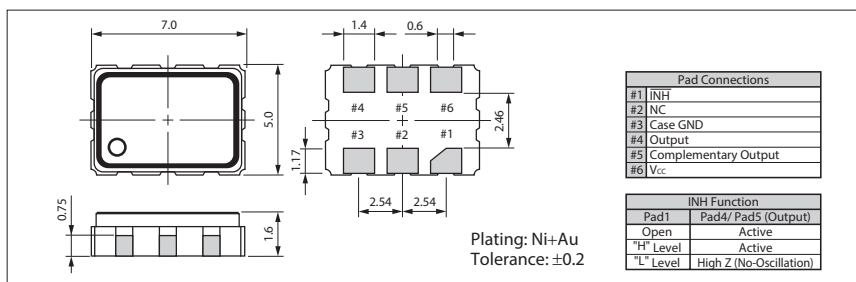
**Specifications**

Item	Symbol	Conditions	Specifications		Unit
			KC7050P-P2	KC7050P-P3	
Output Frequency Range <sup>Note1</sup>	f <sub>o</sub>		25 to 175		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	±50/ -40 to +105°C		×10 <sup>-6</sup>
			±100/ -40 to +85°C		
			±50/ -40 to +85°C		
			±50/ 0 to +70°C		
			±30/ 0 to +70°C		
Storage Temperature Range	T <sub>stg</sub>		-55 to +125		°C
			0 to +70/ -40 to +85		
Operating Temperature Range	T <sub>use</sub>	Standard Specifications Extend (Option)	-40 to +105		°C
Max. Supply Voltage	—		-0.3 to +4.0		V
Supply Voltage	V <sub>cc</sub>		+2.375 to +2.625	+2.97 to +3.63	V
Current Consumption	I <sub>cc</sub>		70 max.		mA
Stand-by Current	I <sub>std</sub>		30 max.		µA
Symmetry	SYM	50ohm @crossing point	50±5		%
Rise/ Fall Time (20% V <sub>cc</sub> to 80% V <sub>cc</sub> Maximum Loaded)	Tr/ Tf	50ohm	0.6 max.		ns
Low Level Output Voltage <sup>Note2</sup>	V <sub>OL</sub>		V <sub>cc</sub> -1.810 to V <sub>cc</sub> -1.620		V
High Level Output Voltage <sup>Note2</sup>	V <sub>OH</sub>		V <sub>cc</sub> -1.025 to V <sub>cc</sub> -0.880		V
Output Load	RL		50		ohm
Input Voltage Range	V <sub>IN</sub>		0 to V <sub>cc</sub>		
Low Level Input Voltage	V <sub>IL</sub>		30% V <sub>cc</sub> max.		V
High Level Input Voltage	V <sub>IH</sub>		70% V <sub>cc</sub> min.		V
Disable Time	t <sub>dis</sub>		200 max.		ns
Enable Time	t <sub>ena</sub>		10 max.		ms
Start-up Time	t <sub>str</sub>	@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 <sub>Sigma</sub>		4 max.		ps
Peak to Peak Jitter	J <sub>PK-PK</sub>		30 max.		ps
Phase Jitter	J <sub>Phase</sub>	@156.25MHz V <sub>cc</sub> =3.3V	BW : 12kHz to 20MHz	0.3 max.	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

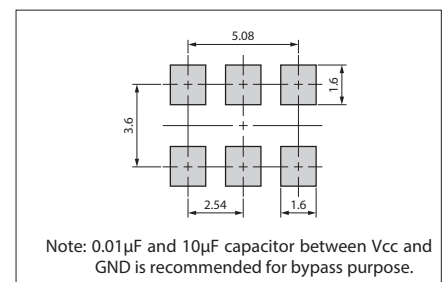
**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)



Clock Oscillators

