



RoHS Compliant

### Features

- Excellent Jitter performance
- Complementary LV-PECL outputs
- Operation at fundamental high frequency
- $\pm 50 \times 10^{-6}$  Available

Table 1

Freq. Tol. Code	$\times 10^{-6}$	Operating Temperature Range (°C)	Note
1	$\pm 100$	0 to +70	Standard specifications
0	$\pm 50$		With only certain frequencies
A	$\pm 100$	-5 to +85	

### How to Order

KC7050T 312.500 P 3 1 E 00  
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0x5.0mm SMD)
- ② Output Frequency
- ③ Output Type (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		150	700	MHz	
Frequency Tolerance <sup>Note2</sup>	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.: 0 to +70°C	-50	+50	$\times 10^{-6}$
			Op. Temp.: 0 to +70°C	-100	+100	
			Op. Temp.: -5 to +85°C	-100	+100	
Storage Temperature Range	T <sub>stg</sub>		-55	+125	°C	
Operating Temperature Range	T <sub>use</sub>	Standard Specifications	0	+70	°C	
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V <sub>CC</sub>	3.3V	2.97	3.63	V	
Current Consumption (Standard Loaded)	I <sub>CC</sub>		—	90	mA	
Symmetry	SYM	50ohm @crossing point	45	55	%	
Rise/ Fall Time (20% to 80% Output Level Standard Loaded)	tr/ tf	50ohm	—	600	ps	
Low Level Output Voltage <sup>Note3</sup>	VOL	0 to +85°C/ Typ. 1.600V	V <sub>CC</sub> -1.810	V <sub>CC</sub> -1.620	V	
		-5 to 0°C/ Typ. 1.605V	V <sub>CC</sub> -1.830	V <sub>CC</sub> -1.555		
High Level Output Voltage <sup>Note3</sup>	VOH	0 to +85°C/ Typ. 2.350V	V <sub>CC</sub> -1.025	V <sub>CC</sub> -0.880	V	
		-5 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>		—	200	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	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	0.2 typ.		ps	
1 Sigma Jitter	J <sub>Sigma</sub>		2 typ.		ps	
Peak to Peak Jitter	J <sub>PK-PK</sub>		20 typ.		ps	

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

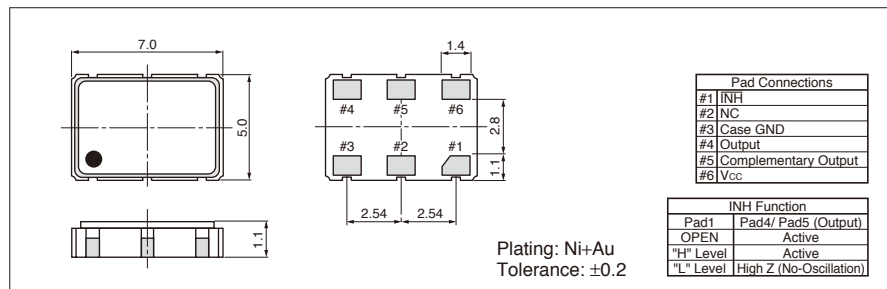
Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

Note2: Aging (10 years @25°C) can correspond.

Note3: DC characteristic

### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)

