



RoHS Compliant

Features

- Low voltage 2.5V
- Excellent Jitter performance
- LV-PECL output
- Operation at fundamental high frequency
- $\pm 50 \times 10^{-6}$ Available

Table 1

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

How to Order

KC7050T 312.500 P 2 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 (2.5V)
- 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 ^{Note1}	f _o		150	700	MHz	
Frequency Tolerance ^{Note2}	f _{tol}	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 _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	0	+70	°C	
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V _{CC}	2.5V	2.38	2.63	V	
Current Consumption (Standard Loaded)	I _{CC}		—	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 ^{Note3}	V _{OL}	0 to +85°C/ Typ. 0.800V -5 to 0°C/ Typ. 0.805V	V _{CC} -1.810 V _{CC} -1.830	V _{CC} -1.405 V _{CC} -1.305	V	
High Level Output Voltage ^{Note3}	V _{OH}	0 to +85°C/ Typ. 1.550V -5 to 0°C/ Typ. 1.495V	V _{CC} -1.025 V _{CC} -1.085	V _{CC} -0.740 V _{CC} -0.880		
Output Load	RL	LV-PECL Output	50		ohm	
Input Voltage Range	V _{IN}		0	V _{CC}	V	
Low Level Input Voltage	V _{IL}		—	30% V _{CC}	V	
High Level Input Voltage	V _{IH}		70% V _{CC}	—	V	
Disable Time	t _{dis}		—	200	ns	
Enable Time	t _{ena}		—	10	ms	
Start-up Time	t _{str}	@Minimum operating voltage to be 0 sec.	—	10	ms	
Deterministic Jitter (DJ)	DJ		0.2 typ.		ps	
1 Sigma Jitter	J _{Sigma}	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	2 typ.		ps	
Peak to Peak Jitter	J _{PK-PK}		20 typ.		ps	

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

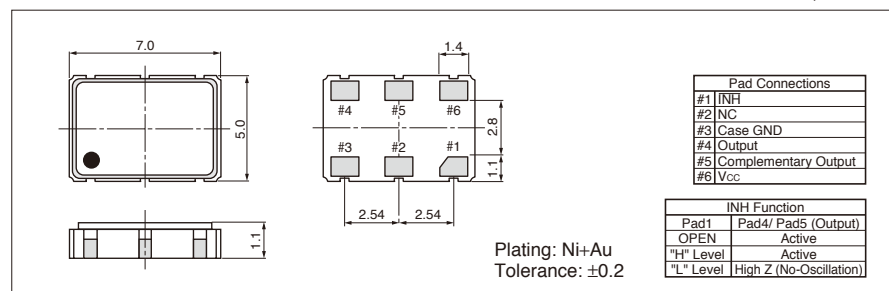
Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

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

Note3: DC characteristic

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

