



SAW Clock Oscillators Surface Mount Type KC7050T-P3 Series



LV-PECL/ 3.3V/ 7.0×5.0mm



Pb Free

RoHS Compliant

Features

- Low jitter
- 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
0	± 50	0 to +70	Standard specifications
1	± 100	0 to +70	With only certain frequencies
A	± 100	-5 to +85	

How to Order

KC7050T 312.500 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 (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 1000 pcs./ reel)

Specifications

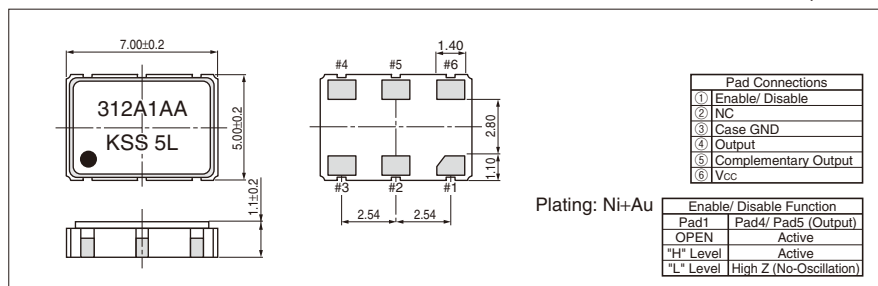
Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f _o		150	700	MHz	
Frequency Tolerance	f _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: 0 to +70°C	-50	+50	×10 ⁻⁶
			Op. Temp.: 0 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}	3.3V	2.97	3.63	V	
Current Consumption (Standard Loaded)	I _{CC}		—	90	mA	
Symmetry	SYM		45	55	%	
Rise/ Fall Time (20% to 80% Output Level Standard Loaded)	tr/ tf		—	600	pS	
Low Level Output Voltage	V _{OL}	0 to +85°C/ Typ. 1.600V -5 to 0°C/ Typ. 1.605V	V _{CC} -1.810 V _{CC} -1.830	V _{CC} -1.620 V _{CC} -1.555	V	
High Level Output Voltage	V _{OH}	0 to +85°C/ Typ. 2.350V -5 to 0°C/ Typ. 2.295V	V _{CC} -1.025 V _{CC} -1.085	V _{CC} -0.880 V _{CC} -0.900		
Output Load (PECL)	R _L	PECL 50Ω @Terminated V _{CC} -2V	49.5	50.5	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	Measured with Wavecrest DTS-2079 VIS/ 6.3.1	0.2 typ.		pS	
1 Sigma Jitter	J _{Sigma}		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.

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

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

