

Clock Oscillators Surface Mount Type KC7050P-P2 Series



LV-PECL/ 2.5V/ 7.0×5.0mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- LV-PECL output
- Supply voltage $V_{CC}=2.5V$
- $\pm 25 \times 10^{-6}$ available

Table 1

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

How to Order

KC7050P 125.000 P 2 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 (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			50	190	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.: -40 to +85°C	-100	+100	×10 ⁻⁶
			Op. Temp.: 0 to +70°C/ -40 to +85°C	-50	+50	
			Op. Temp.: 0 to +70°C	-30	+30	
			Op. Temp.: 0 to +70°C	-25	+25	
Storage Temperature Range	T _{stg}			-55	+125	°C
Operating Temperature Range	T _{use}	Standard Specifications		0	+70	°C
		Extend (Option)		-40	+85	
Max. Supply Voltage	—			-0.5	+5	V
Supply Voltage	V _{CC}			2.375	2.625	V
Current Consumption	I _{CC}			—	90	mA
Stand-by Current	I _{std}			—	30	μA
Symmetry	SYM	50ohm @50% Output Swing		45	55	%
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	50ohm		—	0.6	nS
Low Level Output Voltage ^{Note2}	V _{OL}	Op. Temp.: 0 to +85°C/ Typ. 0.800V		V _{CC} -1.810	V _{CC} -1.405	V
		Op. Temp.: -40 to 0°C/ Typ. 0.805V		V _{CC} -1.830	V _{CC} -1.305	
High Level Output Voltage ^{Note2}	V _{OH}	Op. Temp.: 0 to +85°C/ Typ. 1.550V		V _{CC} -1.025	V _{CC} -0.740	V
		Op. Temp.: -40 to 0°C/ Typ. 1.495V		V _{CC} -1.085	V _{CC} -0.800	
Output Load	R _L	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}			—	150	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 VSI/ 6.3.1		—	2	pS
1 Sigma jitter	J _{Sigma}			—	4	pS
Peak to Peak Jitter	J _{PK-PK}			—	30	pS

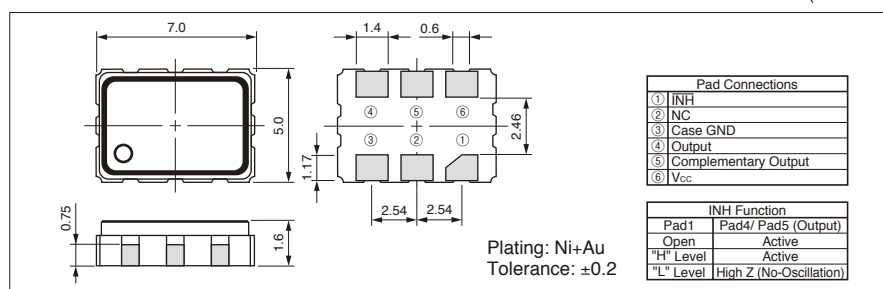
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

