

Clock Oscillators Surface Mount Type

KC7050P-L2 Series



LVDS/ 2.5V/ 7.0×5.0mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- LVDS 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		
U	± 25		
F	± 100	-40 to +85	With only certain frequencies
G	± 50		

How to Order

KC7050P 125.000 L 2 0 E 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (LVDS)
- 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}			—	70	mA
Stand-by Current	I _{std}			—	30	μA
Symmetry	SYM	100ohm @crossing point		45	55	%
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	100ohm		—	0.6	ns
Low Level Output Voltage ^{Note2}	V _{OL}	Typ. 1.1V		0.9	—	V
High Level Output Voltage ^{Note2}	V _{OH}	Typ. 1.43V		—	1.6	V
Differential Output Voltage ^{Note2}	V _{OD}	Typ. 330mV		247	454	mV
Differential Output Voltage Error ^{Note2}	dV _{OD}	dV _{OD} = V _{OD1} –V _{OD2}		—	50	mV
Offset Voltage	V _{OS}	Typ. 1.25V		1.125	1.375	V
Offset Voltage Error	dV _{OS}	dV _{OS} = V _{OS1} –V _{OS2}		—	50	mV
Output Load	RL	LVDS Output		100		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		—	2	ps
1 Sigma Jitter	J _{Sigma}			—	4	ps
Peak to Peak Jitter	J _{PK-PK}			—	30	ps

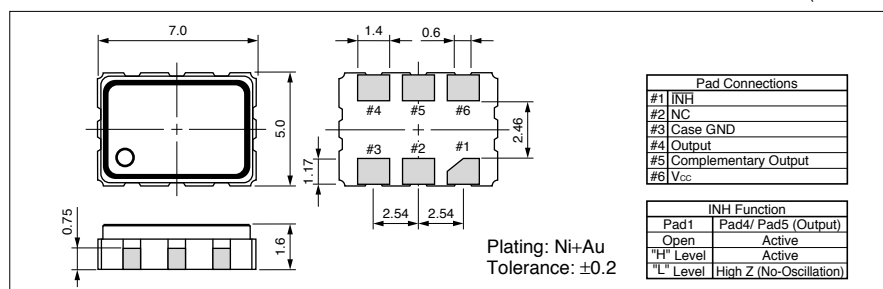
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

