

Voltage Controlled Crystal Oscillators (VCXO)

Surface Mount Type KV7050C-P3 Series



LV-PECL/ 3.3V/ 7.0x5.0mm



RoHS Compliant

Features

- High frequency to 170MHz
- LV-PECL output
- Miniature ceramic package
- Highly reliable with seam welding
- Low Phase Noise

Table 1

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

How to Order

KV7050C 155.520 P 3 0 G 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (LV-PECL)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function/ APR (45/ 55%, Disable, APR50)
- 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}	fo		80	170	MHz	
Frequency Tolerance ^{Note2}	f _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Shock and vibration	Op. Temp.: -10 to +70°C/ -40 to +85°C	-50	+50	$\times 10^{-6}$
			Op. Temp.: -10 to +70°C	-30	+30	
Absolute Pull Range	APR	Standard Specifications Extend (Option)	± 50 ± 100	—	$\times 10^{-6}$	
Frequency Aging	f _{age}	Per 20years @25°C	-15	+15	$\times 10^{-6}$	
Control Voltage	V _C		0	+3.3	V	
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	—		-0.3	+5.0	V	
Supply Voltage	V _{CC}		+2.97	+3.63	V	
Current Consumption	I _{CC}		—	80	mA	
Disable Current	I _{dis}		—	3.5	mA	
Symmetry	SYM	50ohm@crossing point	45	55	%	
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	50ohm	—	0.7	ns	
Low Level Output Voltage ^{Note3}	V _{OL}		—	V _{CC} -1.620	V	
High Level Output Voltage ^{Note3}	V _{OH}		V _{CC} -1.025	—	V	
Output Load	—	LV-PECL Output	50		ohm	
Input Voltage Range	V _{IN}		0	+3.3	V	
Low Level Input Voltage ^{Note3}	V _{IL}		—	30% V _{CC}	V	
High Level Input Voltage ^{Note3}	V _{IH}		70% V _{CC}	—	V	
Input Resistance	—		5	—	Mohm	
Disable Time	t _{dis}		—	200	ns	
Enable Time	t _{ena}		—	2	ms	
Start-up Time	t _{str}	@Minimum operating voltage to be 0 sec.	—	10	ms	
Phase Jitter	J _{Phase}	12kHz to 20MHz @122.88MHz	—	0.5	ps	
Phase Noise @122.88MHz	—		- 68 (@10Hz offset) - 99 (@100Hz offset) -126 (@1kHz offset) -141 (@10kHz offset) -146 (@100kHz offset) -147 (@1MHz offset) -147 (@10MHz offset)		dBc/ Hz	

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

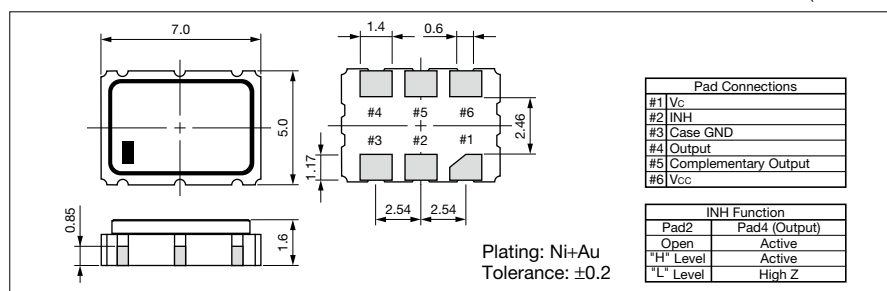
Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

Note2: Please contact us for the Frequency tolerance of -40 to +85°C.

Note3: DC characteristic

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

