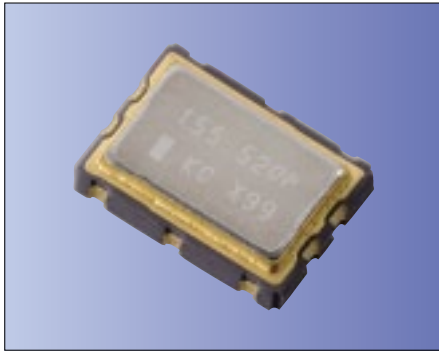


Voltage Controlled Crystal Oscillators (VCXO)

Surface Mount Type KV7050C-P3 Series



CMOS/ 3.3V/ 7.0x5.0mm



RoHS Compliant

Features

- High frequency to 165MHz
- 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	0 to +70	Standard specifications
S	± 30		With only certain frequencies
G	± 50		

How to Order

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

- ① Type (7.0x5.0mm SMD VCXO)
- 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%, Standby, 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}	f _o			70	165	MHz
Frequency Tolerance ^{Note2}	f _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Shock and vibration	Op. Temp.: 0 to +70°C/ -40 to +85°C	-50	+50	×10 ⁻⁶
			Op. Temp.: 0 to +70°C	-30	+30	
Absolute Pull Range	APR	Standard Specifications		±50	—	×10 ⁻⁶
		Extend (Option)		±100	—	
Frequency Aging	f _{age}	Per 20years @25°C		-15	+15	×10 ⁻⁶
Control Voltage	V _c			0	+3.3	V
Storage Temperature Range	T _{stg}			-55	+90	°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}			+2.97	+3.63	V
Current Consumption	I _{CC}			—	50	mA
Disable Current	I _{dis}			—	0.1	mA
Symmetry	SYM	50ohm@crossing point		45	55	%
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	50ohm		—	0.5	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.		—	3	ms
Phase Jitter	J _{Phase}	12kHz to 20MHz @122.88MHz		—	0.5	ps
Phase Noise @122.88MHz	—	- 66 (@10Hz offset) - 97 (@100Hz offset) -125 (@1kHz offset) -141 (@10kHz offset) -146 (@100kHz offset) -147 (@1MHz offset) -147 (@10MHz offset)				dBc/ Hz

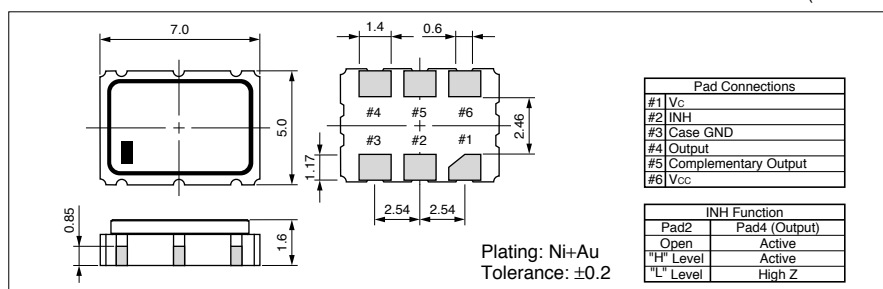
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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

Note2: DC characteristic

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

