

# Voltage Controlled Crystal Oscillators (VCXO)

## Surface Mount Type KV7050G-P3 Series Dual Selectable



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



RoHS Compliant

### Features

- High frequency to 900MHz
- Dual Selectable
- LV-PECL output
- Miniature ceramic package
- Highly reliable with seam welding
- for WDM, Networking Applications

Table 1

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

### How to Order

KV7050G 622A644 P 3 G F 00  
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency/ Selection Frequency
- ③ Output Type (LV-PECL)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry (45/ 55%)
- 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 <sup>Note1</sup>	f1	Primary Output/ #2 "H"-Level or Open	10	900	MHz
	f2	Secondary Output/ #2 "L"-Level	10	900	MHz
Frequency Tolerance @Vc = +1.65V	f <sub>tol</sub>	Initial tolerance, Operating temperature range, Rated power supply voltage change, Aging (1 year @25°C), Shock and vibration	-50	+50	$\times 10^{-6}$
Absolute Pull Range	APR		±100	—	$\times 10^{-6}$
Control Voltage	Vc		0	+3.3	V
Storage Temperature Range	T <sub>stg</sub>		-55	+125	°C
Operating Temperature Range	T <sub>use</sub>		-40	+85	°C
Max. Supply Voltage	—		-0.5	+4.2	V
Supply Voltage	VCC		+2.97	+3.63	V
Linearity	—	Vc = 0V to +3.3V	-10	+10	%
Current Consumption	Icc		—	100	mA
Symmetry	SYM	50ohm @crossing point	45	55	%
Rise/ Fall Time (20% to 80% Output Level)	tr/ tf	50ohm	—	0.4	ns
Low Level Output Voltage <sup>Note2</sup>	VOL		—	VCC-1.62	V
High Level Output Voltage <sup>Note2</sup>	VOH		VCC-1.02	—	V
Output Load	—	LV-PECL Output	50		ohm
Low Level Input Voltage	VIL		—	30% VCC	V
High Level Input Voltage	VIH		70% VCC	—	V
Input Resistance	—		TYP	1	Mohm
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	—	10	ms
Phase Jitter	JPhase	12kHz to 20MHz @622.08MHz	TYP	0.8	ps
Phase Noise @622.08MHz	—	- 40 (@10Hz offset) - 70 (@100Hz offset) - 95 (@1kHz offset) - 105 (@10kHz offset) - 105 (@100kHz offset) - 125 (@1MHz offset) - 135 (@10MHz offset)			dBc/ Hz

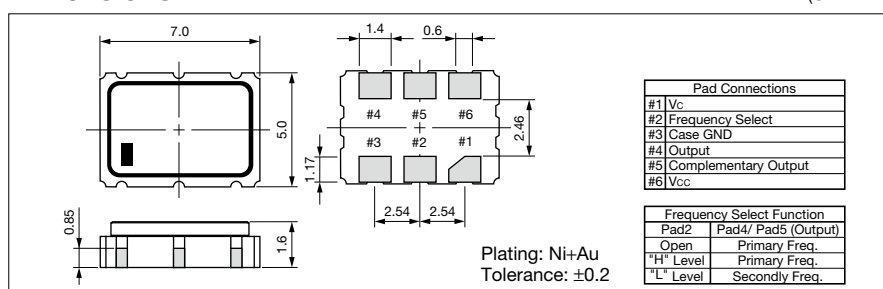
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

