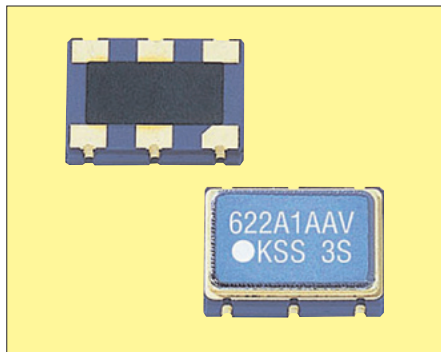


# Voltage Controlled SAW Oscillators

## Surface Mount Type KV7050S-P3 Series (VS-FSO-1D Series)



LV-PECL/ 3.3V/ 7.0×5.0mm



Ph Free

RoHS Compliant

### Features

- Low jitter
- Differential LV-PECL outputs
- Wide pull range  $APR \pm 100 \times 10^{-6}$
- Operation at high frequency fundamental mode

Table 1

Code	APR Code $\times 10^{-6}$	Operating Temperature Range (°C)	Note
1	$\pm 100$	-40 to +85	Standard specifications

### How to Order

KV7050S 622.080 P 3 1 E 00  
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0×5.0mm SMD)
- ② Output Frequency
- ③ Output Type (PECL)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ Enable Function (45/ 55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

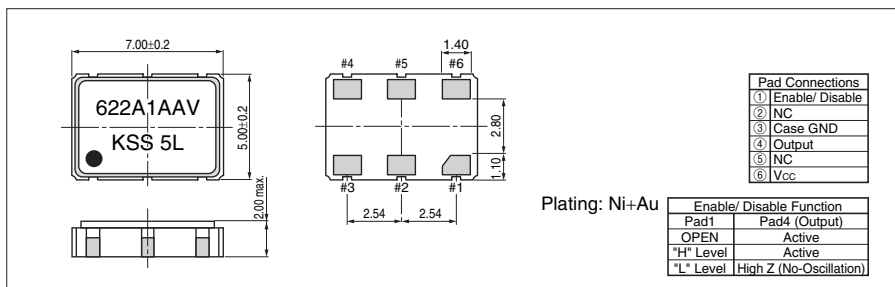
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	Fo		600	700	MHz
Absolute Pull Range	APR	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	$\times 10^{-6}$
Control Voltage Range	VCON		0	3.3	V
Control Voltage Input Impedance	—		100 typ.		kΩ
Transfer Slope	—		Positive		—
Storage Temperature Range	T <sub>stg</sub>		-55	+125	°C
Operating Temperature Range	T <sub>use</sub>	Standard Specifications	-45	+85	°C
Max. Supply Voltage	—		-0.5	+5	V
Supply Voltage	VCC		3.14	3.46	V
Current Consumption (Standard Loaded)	Icc		—	80	mA
Symmetry	SYM		45	55	%
Rise/ Fall Time (20% Vcc to 80% Vcc Standard Loaded)	tr/ tf		—	400	pS
Low Level Output Voltage	VOL		—	1.68	V
High Level Output Voltage	VOH		2.275	—	V
Output Load (PECL)	L <sub>ECL</sub>	PECL 50Ω @Terminated Vcc-2V	49.5	50.5	ohm
Input Voltage Range	VIN		0	Vcc	V
Low Level Input Voltage	VIL		—	30% Vcc	V
High Level Input Voltage	VIH		70% Vcc	—	V
Disable Time	t <sub>dis</sub>		—	200	nS
Enable Time	t <sub>ena</sub>		—	2	mS
Start-up Time	t <sub>str</sub>	@Minimum operation voltage to be 0 sec.	—	10	mS
Phase Jitter	JPhase	Off set Frequency: 50kHz to 80MHz	—	1	pS

Note: All electrical characteristics are defined at the maximum load and operating temperature range.  
 Please contact us for inquiries about operating temperature range, available frequencies and other conditions.

### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)

