

# Voltage Controlled Crystal Oscillators (VCXO)

## Surface Mount Type KV5032C-C3 Series



CMOS/ 3.3V/ 5.0x3.2mm



RoHS Compliant

### Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage  $V_{CC}=3.3V$
- Excellent Jitter performance

### How to Order

**KV5032C 74.1758 C 3 0 F 00**  
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (5.0x3.2mm SMD VCXO)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry (45/ 55%)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Table 1

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

Packaging (Tape & Reel 1000 pcs./ reel)

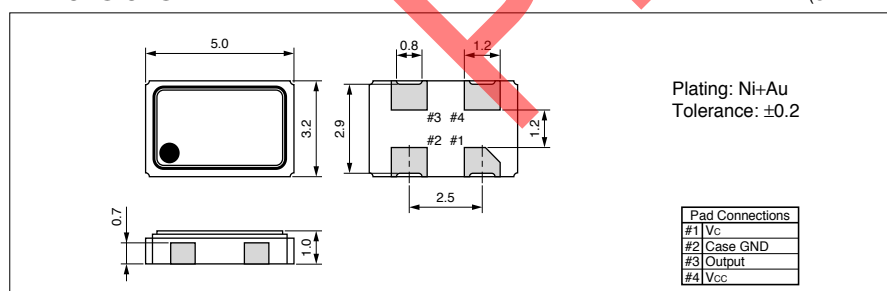
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	$f_o$		1.5	80	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.: -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	$1.5 \leq f_o \leq 30$ $30 < f_o \leq 80$	$\pm 100$ $\pm 50$	-	$\times 10^{-6}$	
Control Voltage	$V_c$		0	+3.3	V	
Storage Temperature Range	$T_{stg}$		-55	+125	°C	
Operating Temperature Range	$T_{use}$	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	-		-0.5	+7	V	
Supply Voltage	$V_{CC}$		+2.97	+3.63	V	
Current Consumption	$I_{CC}$		-	15	mA	
Symmetry	SYM	@50% $V_{CC}$	45	55	%	
Rise/ Fall Time (10% $V_{CC}$ to 90% $V_{CC}$ )	$t_r/t_f$	$1.5 \leq f_o \leq 30$	-	8	ns	
		$30 < f_o \leq 80$	-	5		
Low Level Output Voltage	$V_{OL}$		-	10% $V_{CC}$	V	
High Level Output Voltage	$V_{OH}$		90% $V_{CC}$	-	V	
CMOS Load	L <sub>CMOS</sub>		-	15	pF	
Input Resistance	-	Standard Specifications	100k	-	ohm	
		Extend (Option)	5M	-		
Start-up Time	$t_{str}$	@Minimum operating voltage to be 0 sec.	-	10	ms	
Phase Jitter	J <sub>Phase</sub>	12kHz to 20MHz @27MHz	-	1	ps	
Phase Noise @27.0000MHz	-	- 70 (@10Hz offset) - 100 (@100Hz offset) - 130 (@1kHz offset) - 145 (@10kHz offset) - 152 (@100kHz offset) - 158 (@1MHz offset) - 158 (@10MHz offset)	-	-	dBc/ Hz	

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

### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)

