

Voltage Controlled Crystal Oscillators (VCXO) Surface Mount Type KV7050W-C3 Series



CMOS/ 3.3V/ 7.0×5.0mm



Ph Free

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with vacuum welding
- CMOS output
- Supply voltage $V_{cc}=3.3V$
- Low jitter

Table 1

Freq. Tol. Code	Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	0 to +70	Standard specifications
F	± 100	-40 to +85	With only certain frequencies
G	± 50	-40 to +85	With only certain frequencies

How to Order

KV7050W 74.1758 C 3 0 D 00
 ① ② ③ ④ ⑤ ⑥ ⑦

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

Packaging (Tape & Reel 1000 pcs./ reel)

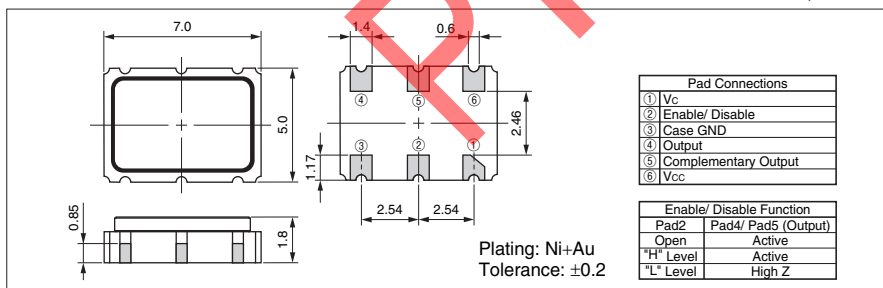
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	Fo		40	85	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.: -40 to +85°C	-100	+100	$\times 10^{-6}$
			Op. Temp.: 0 to +70°C/ -40 to +85°C	-50	+50	
Aging	Aging	@25°C 20 years	—	± 15	$\times 10^{-6}$	
Absolute Pull Range	APR		± 25	± 100	$\times 10^{-6}$	
Linearity	Lin		-10	+10	%	
Control Voltage	Vc		0	3.3	V	
Storage Temperature Range	T _{std}		-55	+90	°C	
Operating Temperature Range	T _{use}	Standard Specifications	0	+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}		—	20	mA	
Disable Current	I _{dis}		—	5	mA	
Symmetry	SYM	@50% V _{cc}	45	55	%	
Rise/ Fall Time (10% V _{cc} to 90% V _{cc})	tr/ tf		—	5	nS	
Low Level Output Voltage	V _{OL}		—	10% V _{cc}	V	
High Level Output Voltage	V _{OH}		90% V _{cc}	—	V	
Output Load	—		—	15	pF	
Input Voltage Range	V _{IN}		0	V _{cc}	V	
Low Level Input Voltage	V _{IL}		—	30% V _{cc}	V	
High Level Input Voltage	V _{IH}		70% V _{cc}	—	V	
Modulation bandwidth	—	@-2dB	15	30	kHz	
Input Resistance	—	Standard Specifications	100k	—	ohm	
		Extend (Option)	5M	—		
Disable Time	t _{dis}		—	100	nS	
Enable Time	t _{ena}		—	100	nS	
Start-up Time	t _{str}	@ Minimum operation voltage to be 0 sec.	—	10	mS	
Phase Jitter	J _{Phase}	12KHz to 20MHz @74.25MHz	0.25	1	pS	
Phase Noise @155.52MHz	—	- 67 (@10Hz offset) - 97 (@100Hz offset) -124 (@1KHz offset) -140 (@10KHz offset) -152 (@100KHz offset) -158 (@1MHz offset) -160 (@10MHz offset)			dBc/ Hz	

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)

