



Ph Free

RoHS Compliant

Features

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

Table 1

Freq. Tol. Code	Freq. Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30	-10 to +70	With only certain frequencies
G	± 50	-40 to +85	

How to Order

KV7050B 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)

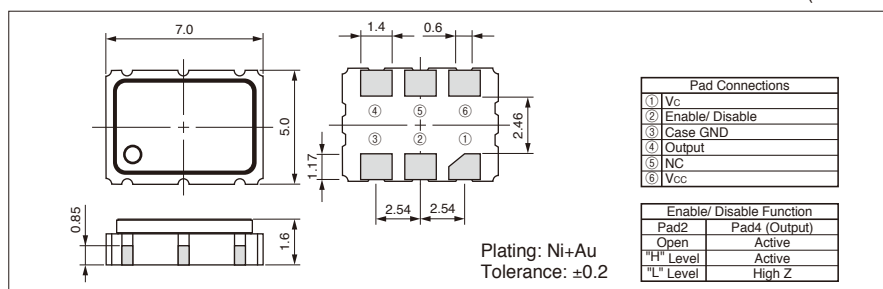
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	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	$1.5 \leq f_o \leq 30$ $30 < f_o \leq 80$	± 100 ± 50	—	$\times 10^{-6}$	
Control Voltage	V_C		0	3.3	V	
Storage Temperature Range	T_{stg}		-55	+90	°C	
Operating Temperature Range	T_{use}	Standard Specifications Extend (Option)	-10 -40	+70 +85	°C	
Max. Supply Voltage	—		-0.5	+7	V	
Supply Voltage	V_{CC}		2.97	3.63	V	
Current Consumption	I_{CC}		—	15	mA	
Disable Current	I_{dis}		—	10	mA	
Symmetry	SYM	@50% V_{CC}	45	55	%	
Rise/ Fall Time (10% V_{CC} to 90% V_{CC})	t_r/ t_f	$1.5 \leq f_o \leq 30$ $30 < f_o \leq 80$	—	8 5	nS	
Low Level Output Voltage	V_{OL}		—	10% V_{CC}	V	
High Level Output Voltage	V_{OH}		90% V_{CC}	—	V	
CMOS Load	L_{CMOS}		—	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	
Input Resistance	—	Standard Specifications Extend (Option)	100k 5M	—	ohm	
Disable Time	t_{dis}		—	100	nS	
Enable Time	t_{ena}		—	100	nS	
Start-up Time	t_{str}	@ Minimum operating voltage to be 0 sec.	—	10	mS	
Phase Jitter	J_{Phase}	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)

