



RoHS Compliant

Features

- High frequency to 170MHz
- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage V_{CC}=3.3V
- Excellent Jitter performance

Table 1

Freq. Tol. Code	Tol. × 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 (7.0x5.0mm SMD VCXO)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function (45/ 55%, Disable)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

Specifications

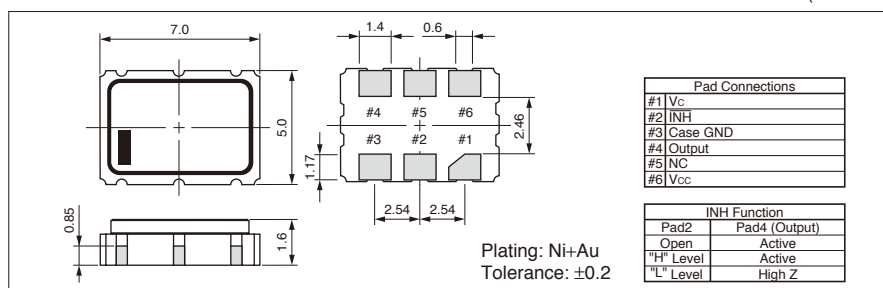
Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range ^{Note1}	f _o		1.5	170	MHz	
Frequency Tolerance ^{Note2}	f _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: -10 to +70°C/ -40 to +85°C	-50	+50	×10 ⁻⁶
			Op. Temp.: -10 to +70°C	-30	+30	
Absolute Pull Range	APR	1.5 ≤ f _o ≤ 30MHz 30 < f _o ≤ 170MHz	±100 ±50	—	×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 Extend (Option)	-10 -40	+70 +85	°C	
Max. Supply Voltage	—		-0.5	+5	V	
Supply Voltage	V _{CC}		+2.97	+3.63	V	
Current Consumption	I _{CC}	1.5 ≤ f _o ≤ 80MHz	—	15	mA	
		80 < f _o ≤ 170MHz	—	35		
Disable Current	I _{dis}	1.5 ≤ f _o ≤ 80MHz	—	10	mA	
		80 < f _o ≤ 170MHz	—	50		
Symmetry	SYM	@50% V _{CC}	45	55	%	
Rise/ Fall Time (10% V _{CC} to 90% V _{CC})	tr/ tf	1.5 ≤ f _o ≤ 30MHz	—	8	ns	
		30 < f _o ≤ 80MHz	—	5		
		80 < f _o ≤ 170MHz	—	4		
Low Level Output Voltage	V _{OL}		—	10% V _{CC}	V	
High Level Output Voltage	V _{OH}		90% V _{CC}	—	V	
Output Load	L _{CMOS}		—	15	pF	
Input Voltage Range	V _{IN}		0	+3.3	V	
Low Level Input Voltage	V _{IL}		—	30% V _{CC}	V	
High Level Input Voltage	V _{IH}		70% V _{CC}	—	V	
Input Resistance	—		5	—	Mohm	
Disable Time	t _{dis}		—	100	ns	
Enable Time	t _{ena}	1.5 ≤ f _o ≤ 80MHz	—	100	ns	
		80 < f _o ≤ 170MHz	—	2	ms	
Start-up Time	t _{str}	@Minimum operating voltage to be 0 sec.	—	10	ms	
Phase Jitter	J _{Phase}	12kHz to 20MHz @155.52MHz	—	1	ps	
Phase Noise @155.52MHz	—	- 55 (@10Hz offset) - 85 (@100Hz offset) - 115 (@1kHz offset) - 130 (@10kHz offset) - 145 (@100kHz offset) - 150 (@1MHz offset) - 155 (@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.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

