



Clock Oscillators Surface Mount Type

KC7050B Series (FXO-31F Series)



CMOS/ 3.3V/ 5.0V/ 7.0×5.0mm



RoHS Compliant

Features

- Surface mount type suitable for auto pick-and-place
- Reflow soldering compatible
- CMOS, TTL IC direct drive is possible
- With tri-state function
- Broad frequency range from 1.8MHz to 50MHz
- Supply voltage Vcc=3.3/ 5.0V available

Frequency Tolerance (Overall)

Freq. Tol. Code	$\times 10^{-6}$	Operating Temperature Range (°C)	Note
1	± 100	-10 to +70 (Standard)	1.8 to 50MHz
0	± 50		1.8 to 33MHz
S	± 30		

How to Order

KC7050B 25.0000 C 3 1 A 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage 5=5.0V, 3=3.3V
- ⑤ Frequency Tolerance (See Table at Left)
- ⑥ Symmetry/ INH Function
A: 40/ 60%, Disable
B: 40/ 60%, Stand-by
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Symmetry/ INH Function

Freq. (MHz)	Code	
	KC7050B-C5	KC7050B-C3
1.8 to 39.9	A	A
40 to 50	A	B

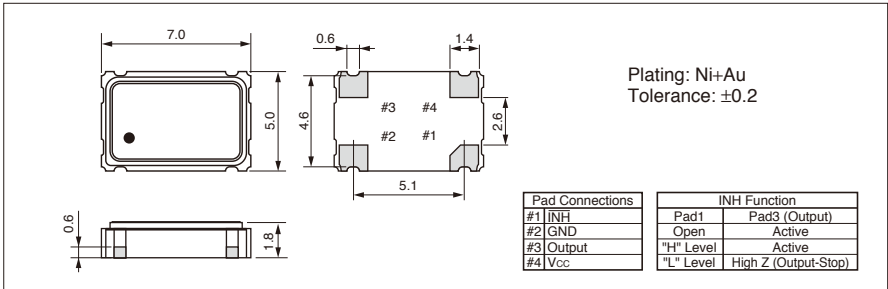
Specifications

Item	Symbol	Conditions		Units
		KC7050Bxx.xxxxC5xA00 (FXO-31FH)	KC7050Bxx.xxxxC3xx00 (FXO-31FL)	
Output Frequency Range	fo	1.8 to 50		MHz
Frequency Tolerance (Overall)	f_tol	±30 (to 33MHz)		×10 ⁻⁶
		±50 (to 33MHz)		
		±100 (to 50MHz)		
Storage Temperature Range	T_stg	−40 to +85		°C
Operating Temperature Range	T_use	−10 to +70		°C
Max. Supply Voltage	—	7 max.		V
Supply Voltage	V _{CC}	5±0.5	3.3±0.3	V
Current Consumption	I _{CC}	25 max. (1.8 to 15MHz)	18 max. (1.8 to 39.9MHz)	mA
		30 max. (15.1 to 32MHz)		
		45 max. (32.1 to 50MHz)	25 max. (40 to 50MHz)	
Stand-by/ Disable Current	I _{std}	10 max.		μA
Symmetry	SYM	40 to 60@50%V _{CC}		%
Rise/ Fall Time	tr/ tf	10 max.		ns
Low Level Output Voltage	V _{OL}	10% V _{CC} max.		V
High Level Output Voltage	V _{OH}	90% V _{CC} min.		V
CMOS Load	L _{CMOS}	50 max.	20 max.	pF
Input Voltage Range	V _{IN}	0 to V _{CC}	0 to V _{CC}	V
Low Level Input Voltage	V _{IL}	0.8 max.	0.3 max.	V
High Level Input Voltage	V _{IH}	2.2 min.	2.2 min.	V
Disable Time	t _{dis}	150 max.		ns
Enable Time	t _{ena}	5 max.		ms
Start-up Time	t _{str}	10 max.		ms

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)

