

Clock Crystal Oscillators Surface Mount Type K50-HC Series



CMOS/ 5.0V/ 7.0×5.0mm

This product is NOT recommended for new designs.



Pb Free

RoHS Conforming

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{DD}=5.0V$
- ±25ppm available

Table 1

Stability Code	(ppm)	T_{OPR} (°C)	Note
0	± 50	-10 to +70 (Standard)	Standard specifications
S	± 30		With only certain frequencies
U	± 25		
F	±100	-40 to +85 (Extend)	With only certain frequencies
G	± 50		

How to Order

K50-HC 0 - C S E 25.0000
 ① ② ③ ④ ⑤ ⑥

- ① Type(7×5 SMD, 5.0V)
 - ② Frequency Stability Code(See Table1)
 - ③ CMOS Output
 - ④ Duty Ratio(S: 45% to 55% STD)
 - ⑤ Enable/Disable Function(STD)
 - ⑥ Oscillation Frequency(Ex.: 25.0000MHz)
- Packaging(Tape & Reel 1Kpcs/reel)

Specifications

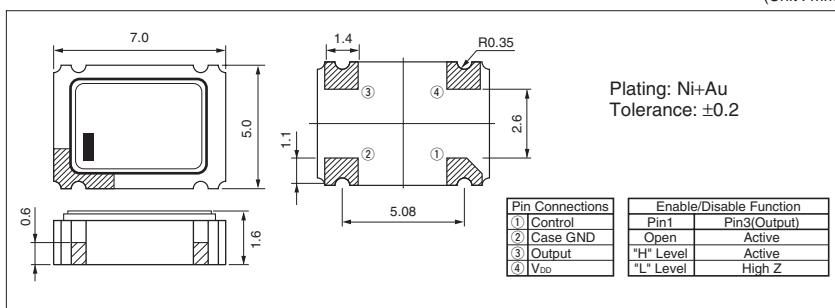
Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	f_{OUT}		1.5	68	MHz
Frequency Stability	F_{SBY}	Overall conditions: initial tolerance, operating temperature range, rated power supply voltage change, load change, aging(1year @25°C), shock and vibration	-25	+25	ppm
			-30	+30	
			-50	+50	
			-55	+125	
Storage Temperature Range	T_{STG}		-10	+70	°C
Operating Temperature Range	T_{OPR}	Standard Extend(option)	-40	+85	
Max. Supply Voltage	—		-0.5	7.0	Volt
Supply Voltage	V_{DD}	Stability: ±50ppm, ±30ppm, ±100ppm(Ext Temp)	4.5	5.5	
		Stability: ±25ppm, ±50ppm(Ext Temp)	4.75	5.25	
Current Consumption (Maximum Loaded)	I_{DD}	$1.5 \leq f_{OUT} \leq 20\text{MHz}$	—	25	mA
		$20 < f_{OUT} \leq 40\text{MHz}$	—	35	
		$40 < f_{OUT} \leq 68\text{MHz}$	—	50	
Disable Current	I_{DE}	@68.0000MHz	—	30	mA
Duty Ratio(Symmetry)	SYM	@50% V_{DD}	45	55	%
Rise/Fall Time (10% V_{DD} to 90% V_{DD} Maximum Loaded)	Tr/Tf	$8 \leq f_{OUT} \leq 26\text{MHz}$	—	10	nS
		$26 < f_{OUT} \leq 45\text{MHz}$	—	8	
		$45 < f_{OUT} \leq 68\text{MHz}$	—	5	
Output Voltage-"L"	V_{OL}	$I_{OL}=16\text{mA}$	—	$10\% V_{DD}$	Volt
Output Voltage-"H"	V_{OH}	$I_{OH}=-16\text{mA}$	90% V_{DD}	—	
Output Load(CMOS)	CL	$8 \leq f_{OUT} \leq 50\text{MHz}$	—	50	pF
		$50 < f_{OUT} \leq 68\text{MHz}$	—	15	
Input Voltage Range	V_{IN}		0	V_{DD}	Volt
Input Voltage-"L"	V_{IL}		—	0.8	Volt
Input Voltage-"H"	V_{IH}		2.2	—	
Output Disable Time	—		—	100	nS
Output Enable Time	—		—	100	nS
Start-up Time	ST	@Minimum operating Voltage to be 0sec.	—	10	mS

Note: Please contact us for inquiries about extended operating temperature range, available frequencies and other conditions.

All electrical characteristics are defined at the maximum load and operating temperature range.

Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)

