



Pb Free

RoHS Compliant

### Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage  $V_{DD}=5.0V$
- $\pm 25 \times 10^{-6}$  available

**Table 1**

Freq. Tol. Code	$\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	$\pm 50$	-10 to +70	Standard specifications
S	$\pm 30$		
U	$\pm 25$		With only certain frequencies
F	$\pm 100$	-40 to +85	
G	$\pm 50$		

### How to Order

KC7050C 25.0000 C 5 0 D 00

① ② ③ ④ ⑤ ⑥ ⑦

① Type (7.0×5.0mm SMD)

② Output Frequency

③ Output Type (CMOS)

④ Supply Voltage (5.0V)

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 1000pcs./reel)

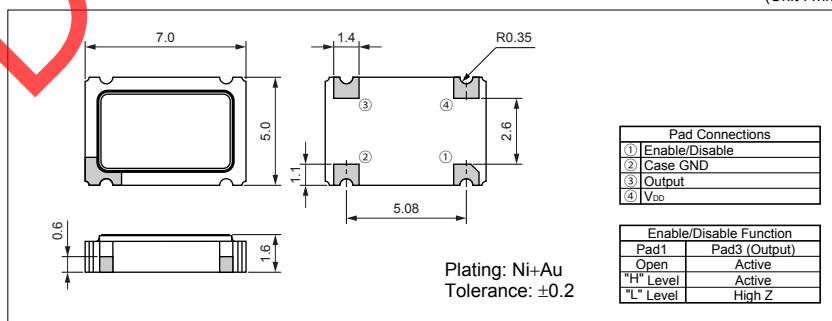
### Specifications

Item	Symbol	Conditions	Min.	Max.	Units
Output Frequency Range	F <sub>o</sub>		1.5	68	MHz
Frequency Tolerance	F <sub>tol</sub>	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1year @25°C), Shock and vibration	-100	+100	$\times 10^{-6}$
		Op. Temp.: -10 to +70°C / -40 to +85°C	-50	+50	
		Op. Temp.: -10 to +70°C / -40 to +85°C	-30	+30	
		Op. Temp.: -10 to +70°C	-25	+25	
Storage Temperature Range	T <sub>stg</sub>		-55	+125	°C
Operating Temperature Range	T <sub>use</sub>	Standard Specifications	-10	+70	°C
		Extend (Option)	-40	+85	
Max. Supply Voltage	—		-0.5	+7	V
Supply Voltage	V <sub>DD</sub>	Freq. Tol. Code: 0, S, F	4.5	5.5	V
		Freq. Tol. Code: U, G	4.75	5.25	
Current Consumption (Maximum Loaded)	I <sub>DD</sub>	1.5≤F <sub>o</sub> ≤20MHz	—	25	mA
		20<F <sub>o</sub> ≤40MHz	—	35	
		40<F <sub>o</sub> ≤68MHz	—	50	
Disable Current	I <sub>dis</sub>		—	30	mA
Symmetry	SYM	@50% V <sub>DD</sub>	45	55	%
Rise/Fall Time (10% V <sub>DD</sub> to 90% V <sub>DD</sub> Maximum Loaded)	Tr/Tf	1.5≤F <sub>o</sub> ≤26MHz	—	10	nS
		26<F <sub>o</sub> ≤50MHz	—	8	
		50<F <sub>o</sub> ≤68MHz	—	5	
Output Voltage-"L"	V <sub>OL</sub>	I <sub>OL</sub> =16mA	—	10% V <sub>DD</sub>	V
Output Voltage-"H"	V <sub>OH</sub>	I <sub>OH</sub> =16mA	90% V <sub>DD</sub>	—	V
Output Load	CMOS	CMOS Output	1.5≤F <sub>o</sub> ≤50MHz	50	pF
			50<F <sub>o</sub> ≤68MHz	15	
Input Voltage Range	V <sub>IN</sub>		0	V <sub>DD</sub>	V
Input Voltage-"L"	V <sub>IL</sub>		—	0.8	V
Input Voltage-"H"	V <sub>IH</sub>		2.2	—	V
Disable Time	—		—	100	nS
Enable Time	—		—	100	mS
Start-up Time	ST	@ Minimum Operation Voltage to be 0 sec.	—	10	mS

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



### Recommended Land Pattern (Unit : mm)

