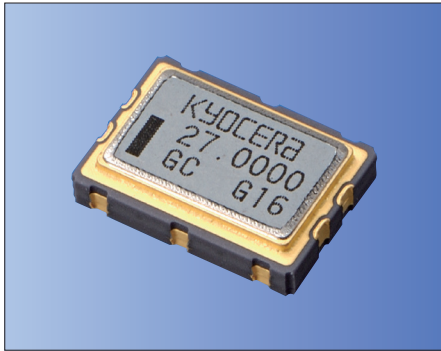




CMOS/ 3.3V/ 7.0×5.0mm



RoHS Compliant

**Features**

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

**Table 1**

Freq. Tol. Code	× 10 <sup>-6</sup>	Operating Temperature Range (°C)	Note
0	±50	-10 to +70	Standard specifications
S	±30	-10 to +70	Please contact us for available frequencies.
G	±50	-40 to +85	

**How to Order**

KV7050B 24.576 C 3 □ □ 00  
① ② ③ ④ ⑤ ⑥ ⑦

- ①Series
- ②Output Frequency
- ③Output Type (CMOS)
- ④Supply Voltage (3.3V)
- ⑤Frequency Tolerance (See Table 1)
- ⑥Symmetry/ INH Function/ Input Resistance  
D:1.5≤fo≤70MHz  
N:70≤fo≤170MHz
- ⑦Individual Specification (STD Specification is "00".)

Packaging (Tape & Reel 1000 pcs./ reel)

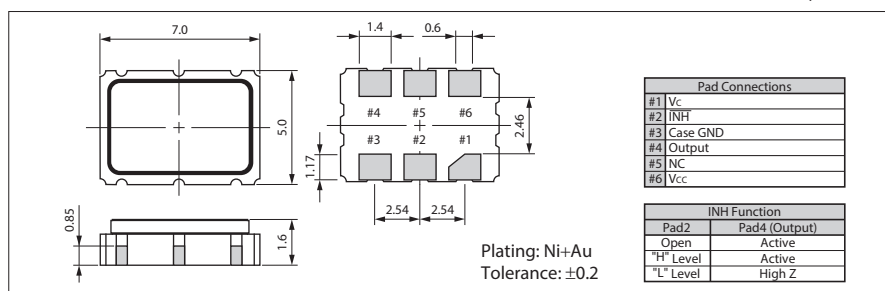
**Specifications**

Item	Symbol	Conditions	Min.	Max.	Unit	
Output Frequency Range <sup>Note1</sup>	fo		1.5	170	MHz	
Frequency Tolerance <sup>Note2</sup>	f <sub>tol</sub>	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Temp.: -10 to +70°C/ -40 to +85°C	-50	+50	× 10 <sup>-6</sup>
			Temp.: -10 to +70°C	-30	+30	
Absolute Pull Range	APR	1.5≤fo≤30MHz 30<fo≤170MHz	±100 ±50	—	× 10 <sup>-6</sup>	
Control Voltage	Vc		0	+3.3	V	
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	—	1.5≤fo≤80MHz 80<fo≤170MHz	-0.5	+7.0	V	
Supply Voltage	Vcc		+2.97	+3.63		
Current Consumption	Icc	1.5≤fo≤80MHz	—	15	mA	
		80<fo≤170MHz	—	30		
Disable Current	I <sub>dis</sub>	1.5≤fo≤80MHz	—	10	mA	
		80<fo≤170MHz	—	15		
Symmetry	SYM	@50% Vcc	45	55	%	
Rise/ Fall Time (10% Vcc to 90% Vcc)	Tr/ Tf	1.5≤fo≤30MHz	—	8	ns	
		30<fo≤80MHz	—	5		
		80<fo≤170MHz	—	2.5		
Low Level Output Voltage	V <sub>OL</sub>		—	10% Vcc	V	
High Level Output Voltage	V <sub>OH</sub>		90% Vcc	—	V	
Output Load	L <sub>CMOS</sub>	CMOS Output	—	15	pF	
Input Voltage Range	V <sub>IN</sub>		0	+3.3	V	
Low Level Input Voltage	V <sub>IL</sub>		—	30% Vcc	V	
High Level Input Voltage	V <sub>IH</sub>		70% Vcc	—	V	
Input Resistance	—	Code◎ : D	100	—	k ohm	
		Code◎ : G or N	5	—	Mohm	
Disable Time	t <sub>dis</sub>	1.5≤fo≤30MHz	—	100	ns	
		30≤fo≤170MHz	—	200		
Enable Time	t <sub>ena</sub>	1.5≤fo≤80MHz	—	100	ns	
		80<fo≤170MHz	—	2		
Start-up Time	t <sub>str</sub>	@Minimum operating voltage to be 0 sec.	—	10	ms	
Phase Jitter	J <sub>Phase</sub>	@155.52MHz	—	0.4	ps	
			BW : 12kHz to 20MHz			
Phase Noise	—	@155.52MHz	@10Hz offset	Typ. -70	dBc/ Hz	
			@100Hz offset	Typ. -102		
			@1kHz offset	Typ. -128		
			@10kHz offset	Typ. -147		
			@100kHz offset	Typ. -158		
			@1MHz offset	Typ. -160		
			@10MHz offset	Typ. -161		

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.  
Note2: Please contact us for the Frequency tolerance of -40 to +85°C.

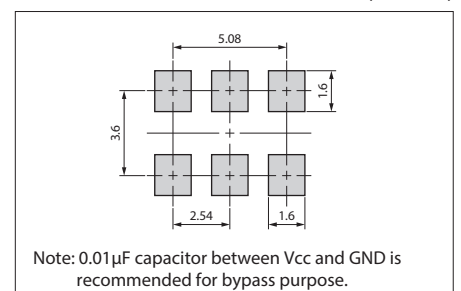
**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)



# Mouser Electronics

Authorized Distributor

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