



Clock Oscillators Surface Mount Type KC5032C-C3 Series (K30-3C Series)

CMOS / 3.3V / 5.0×3.2mm



Pb Free

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{DD} = 3.3V$
- $\pm 25 \times 10^{-6}$, $\pm 20 \times 10^{-6}$ available

Table 1

Freq. Tol. Code	Tol. $\times 10^{-6}$	Operating Temperature Range (°C)	Note
0	± 50	-10 to +70	Standard specifications
S	± 30		
U	± 25		
W	± 20		
F	± 100	-40 to +85	With only certain frequencies
G	± 50		

How to Order

KC5032C 25.0000 C 3 0 E 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (5.0×3.2mm SMD)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (3.3V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/Enable Function (45/55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 1000pcs./reel)

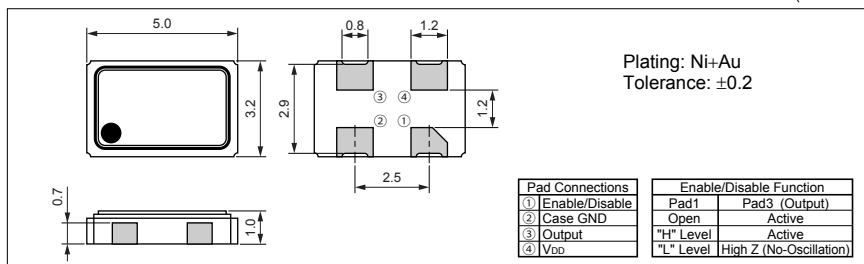
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	Fo		1.8	160	MHz	
Frequency Tolerance	F _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1year @25°C), Shock and vibration	Op. Temp.: -40 to +85°C	-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	
			Op. Temp.: -10 to +70°C	-20	+20	
Storage Temperature Range	T _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+85		
Max. Supply Voltage	—		-0.5	+7.0	V	
Supply Voltage	V _{DD}	Freq. Tol.Code: 0, S, F	2.97	3.63	V	
		Freq. Tol.Code: U, G	3.14	3.46		
		Freq. Tol.Code: W	3.20	3.40		
Current Consumption (Maximum Loaded)	I _{DD}	1.8 ≤ Fo ≤ 20MHz	—	10	mA	
		20 < Fo ≤ 40MHz	—	15		
		40 < Fo ≤ 60MHz	—	30		
		60 < Fo ≤ 100MHz	—	35		
		100 < Fo ≤ 135MHz	—	45		
		135 < Fo ≤ 160MHz	—	60		
Stand-by Current	I _{std}		—	10	μA	
Symmetry	SYM	@50% V _{DD}	45	55	%	
Rise/ Fall Time (10% V _{DD} to 90% V _{DD} Maximum Loaded)	Tr/Tf	1.8 ≤ Fo ≤ 26MHz	—	10	nS	
		26 < Fo ≤ 45MHz	—	8		
		45 < Fo ≤ 100MHz	—	5		
		100 < Fo ≤ 160MHz	—	2.5		
Output Voltage-"L"	V _{OL}	I _{OL} =8mA	—	10% V _{DD}	V	
Output Voltage-"H"	V _{OH}	I _{OH} =-8mA	90% V _{DD}	—	V	
Output Load	L _{CMOS}	CMOS Output	—	15	pF	
Input Voltage Range	V _{IN}		0	V _{DD}	V	
Input Voltage-"L"	V _{IL}		—	30% V _{DD}	V	
Input Voltage-"H"	V _{IH}		70% V _{DD}	—	V	
Disable Time	—		—	150	nS	
Enable Time	—		—	5	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

(Unit : mm)



Recommended Land Pattern

(Unit : mm)

