Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Clock Oscillators Surface Mount Type
KC5032C-C2 Series (K30-2C Series)

KYOCERA

CMOS/ 2.5V/ 5.0× 3.2mm

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage Vcc=2.5V
  Lower voltage available
- ±25×10^{-6}, ±20×10^{-6} available

Table 1

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

How to Order

KC5032C 25.0000 C 2 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 (2.5V)
⑤ Frequency Tolerance (See Table 1)
⑥ Symmetry/ INH Function
(45/ 55%, Stand-by)
⑦ Customer Special Model Suffix
(STD Specification is “00”)

Packaging (Tape & Reel 1000 pcs./ reel)

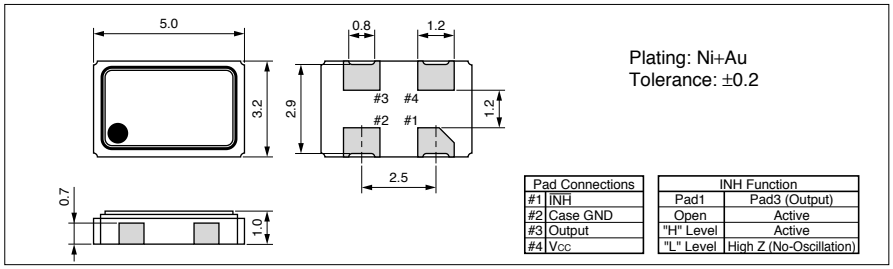
Specifications

Item	Symbol	Conditions		Min.	Max.	Units
Output Frequency Range	fo			1.8	125	MHz
Frequency Tolerance	f_tol	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: –40 to +85°C	–100	+100	×10^{-6}
			Op. Temp.: –10 to +70°C/ –40 to +85°C	–50	+50	
			Op. Temp.: –10 to +70°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	V
Supply Voltage	Vcc	Freq. Tol.Code: 0, S, F		+2.25	+2.75	V
		Freq. Tol.Code: U, G		+2.38	+2.62	
		Freq. Tol.Code: W		+2.43	+2.57	
Current Consumption (Maximum Loaded)	Icc	1.8≤fo≤20MHz		—	5	mA
		20<fo≤40MHz		—	10	
		40<fo≤60MHz		—	15	
		60<fo≤85MHz		—	20	
		85<fo≤100MHz		—	22	
		100<fo≤125MHz		—	27	
Stand-by Current	I_std			—	10	µA
Symmetry	SYM	@50% Vcc		45	55	%
Rise/ Fall Time (10% Vcc to 90% Vcc Maximum Loaded)	tr/ tf	1.8≤fo≤40MHz		—	7	ns
		40<fo≤85MHz		—	4	
		85<fo≤125MHz		—	3	
Low Level Output Voltage	VOL	IOL=4mA/ 8mA (40MHz<fo)		—	10% Vcc	V
High Level Output Voltage	VOH	IOH=–4mA/ –8mA (40MHz<fo)		90% Vcc	—	V
CMOS Load	L_CMOS	CMOS Output		—	15	pF
Input Voltage Range	VIN			0	Vcc	V
Low Level Input Voltage	VIL			—	30% Vcc	V
High Level Input Voltage	VIH			70% Vcc	—	V
Disable Time	t_dis			—	150	ns
Enable Time	t_ena			—	5	ms
Start-up Time	t_str	@Minimum operating voltage to be 0 sec.		—	10	ms
1 Sigma Jitter	JSigma	Measured with Wavecrest DTS-2079 *VISI 6.3.1*	1.8≤fo<40MHz	—	8	ps
			40≤fo≤100MHz	—	5	ps
			100<fo≤125MHz	—	4	ps
Peak to Peak Jitter	JPK-PK		1.8≤fo<40MHz	—	80	ps
			40≤fo≤100MHz	—	40	ps
			100<fo≤125MHz	—	30	ps

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)



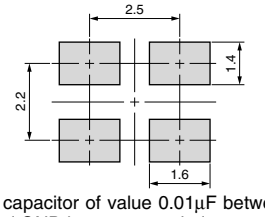
Plating: Ni+Au
Tolerance: ±0.2

Pad Connections	
#1	INH
#2	Case GND
#3	Output
#4	Vcc

INH Function	
Pad1	Pad3 (Output)
Open	Active
"H" Level	Active
"L" Level	High Z (No-Oscillation)

Recommended Land Pattern

(Unit: mm)



Note: A capacitor of value 0.01µF between Vcc and GND is recommended.