

Clock Oscillators Surface Mount Type

KC2520B-C2 Series



CMOS/ 2.5V, 3.3V Compatible/ 2.5×2.0mm



Ph Free

RoHS Compliant

Features

- Miniature ceramic package
2.5 (L) ×2.0 (W) ×0.7 (H) mm (Typ.)
- Highly reliable with seam welding
- CMOS output
- Supply voltage V_{CC} =2.5V/ 3.3V Compatible
Low Power Supply Consumption
- Wide Operating Voltage Range 2.25 to 3.63V

Table 1

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

How to Order

KC2520B 25.0000 C 2 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (2.5×2.0mm SMD)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (2.5V, 3.3V Compatible)
- 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 2000 pcs./ reel)

Specifications

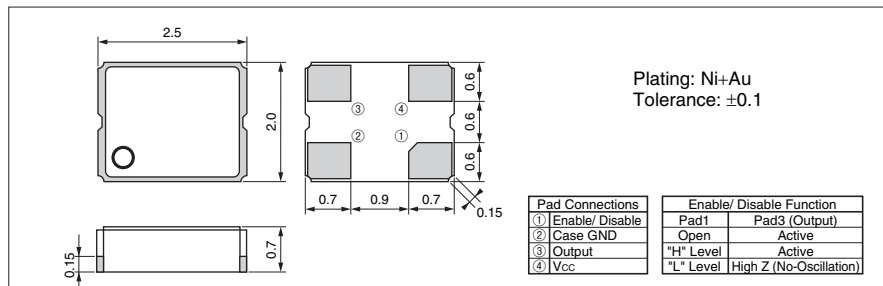
Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f_o		1.5	54	MHz	
Frequency Tolerance	f_{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Load change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: -40 to +85°C	-100	+100	$\times 10^{-6}$
			Op. 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	
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	+6	V	
Supply Voltage	V_{CC}	Freq. Tol. Code: 0, S, F, U, G	2.25	3.63	V	
Current Consumption (Maximum Loaded)	I_{CC}	$1.5 \leq f_o \leq 24$ MHz	—	3	mA	
		$24 < f_o \leq 40$ MHz	—	4		
		$40 < f_o \leq 54$ MHz	—	5		
Stand-by Current	I_{std}		—	10	μ A	
Symmetry	SYM	@ 50% V_{CC}	45	55	%	
Rise/ Fall Time (10% V_{CC} to 90% V_{CC} Maximum Loaded)	t_r / t_f		—	5	nS	
Low Level Output Voltage	V_{OL}	$I_{OL} = 4$ mA	—	10% V_{CC}	V	
High Level Output Voltage	V_{OH}	$I_{OH} = -4$ mA	90% V_{CC}	—	V	
Output Load	CL	CMOS Output	—	15	pF	
Input Voltage Range	V_{IN}		0	V_{CC}	V	
Low Level Input Voltage	V_{IL}		—	30% V_{CC}	V	
High Level Input Voltage	V_{IH}		70% V_{CC}	—	V	
Disable Time	t_{dis}		—	100	nS	
Enable Time	t_{ena}		—	5	mS	
Start-up Time	t_{str}	@ 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 inquiry about operating temperature range, available frequencies and other conditions.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

