

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	-40 to +85	With only certain frequencies
F	± 100		
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)

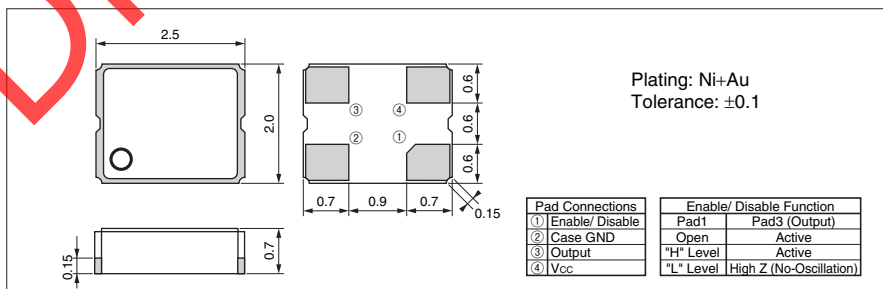
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	Fo		1.5	50	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	+6.0	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 ≤ Fo ≤ 24MHz	—	3	mA	
		24 < Fo ≤ 40MHz	—	4		
		40 < Fo ≤ 50MHz	—	5		
Stand-by Current	I _{std}		—	10	μA	
Symmetry	SYM	@ 50% V _{CC}	45	55	%	
Rise/ Fall Time (10% V _{CC} to 90% V _{CC} Maximum Loaded)	tr/ tf		—	5	nS	
Low Level Output Voltage	V _{OL}	I _{OL} = 4mA	—	10% V _{CC}	V	
High Level Output Voltage	V _{OH}	I _{OH} = -4mA	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 _{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)

