



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} =1.8V/ 2.5V/ 3.3V
Compatible Low Power Supply Consumption
- Wide Operating Voltage Range 1.6 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 1 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 (1.8V, 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)

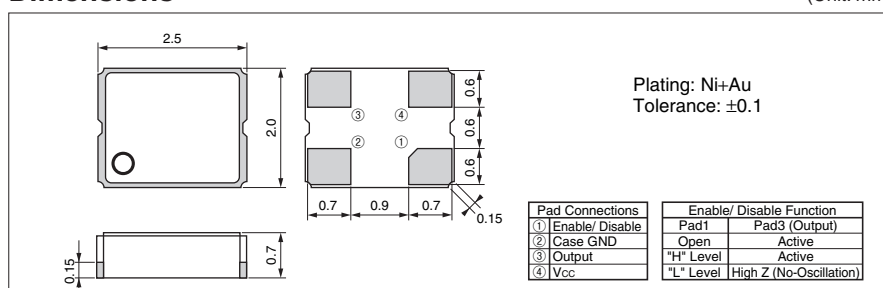
Specifications

Item	Symbol	Conditions	Min.	Max.	Units	
Output Frequency Range	f_o		1.5	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	V	
Supply Voltage	V_{CC}	Freq. Tol.Code: 0, S, U, F, G	1.6	3.63	V	
Current Consumption (Maximum Loaded/ 1.6< V_{DD} <2.0V)	I_{CC}	1.5< f_o <24MHz	—	2.5	mA	
		24< f_o <40MHz	—	3.5		
		40< f_o <50MHz	—	4.5		
Current Consumption (Maximum Loaded/ 2.0< V_{DD} <2.8V)	I_{CC}	1.5< f_o <24MHz	—	3	mA	
		24< f_o <40MHz	—	4.5		
		40< f_o <50MHz	—	5		
Current Consumption (Maximum Loaded/ 2.8< V_{DD} <3.63V)	I_{CC}	1.5< f_o <24MHz	—	3.5	mA	
		24< f_o <40MHz	—	5		
		40< f_o <50MHz	—	6		
Stand-by Current	I_{std}		—	10	μ A	
Symmetry	SYM	@ 50% V_{CC}	45	55	%	
		1.6< V_{DD} <2.0V	—	6.5		
		2.0< V_{DD} <2.8V	—	5		
Rise/ Fall Time (10% V_{CC} to 90% V_{CC} Maximum Loaded)	t_r/ t_f	2.8< V_{DD} <3.63V	—	4.5	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	
CMOS Load	L_{CMOS}	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)

