

Clock Oscillators Surface Mount Type

KC2520B-C2 Series



CMOS/ 2.5V ~ 3.3V/ 2.5×2.0mm



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 2.5/ 3.3V
Wide operating voltage range 2.25 to 3.63V
- Low current consumption
- High output frequency 160MHz

Table 1

Freq. Tol. Code	Tol. × 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		
6	± 50		

How to Order

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

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

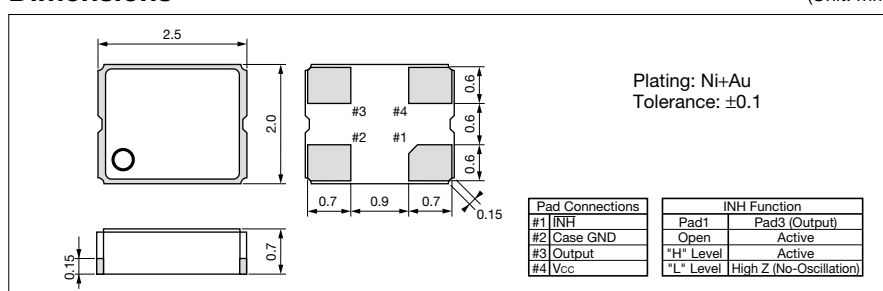
Specifications

Item	Symbol	Conditions	Specifications		Units	
			Min.	Max.		
Output Frequency Range	fo	fo>125MHz	125	160	MHz	
Frequency Tolerance	f _{tol}	Over all conditions : initial tolerance, operating temperature range, rated power supply voltage change, load change, aging (1year @25°C), shock and vibration	Op. Temp. : -40 ~ +85°C	-100	+100	×10 ⁻⁶
			Op. Temp.: -10 to +70°C/ -40 to +85°C/ -40 to +105°C	-50	+50	
			Op. Temp. : -10 ~ +70°C	-30	+30	
Storage Temperature Range	T _{stg}		-55	+125	°C	
Operating Temperature Range	T _{use}	Standard Specifications	-10	+70	°C	
		Extend (Option)	-40	+105		
Max. Supply Voltage	—		-0.3	+4.0	V	
Supply Voltage	V _{cc}		+2.25	+3.63	V	
Current Consumption (Maximum Loaded/ 2.25≤V _{cc} ≤2.75V)	I _{cc}	125<fo≤160MHz	—	25	mA	
Current Consumption (Maximum Loaded/ 2.75≤V _{cc} ≤3.63V)		125<fo≤160MHz	—	27		
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	125<fo≤160MHz	—	2.5	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}	—		
Output Load	L _{CMOS}	CMOS Output	—	15	pF	
Low Level Input Voltage	V _{IL}		—	30% V _{cc}	V	
High Level Input Voltage	V _{IH}		70% V _{cc}	—		
Disable Time	t _{dis}		—	100	ns	
Enable Time	t _{ena}		—	5	ms	
Start-up Time	t _{str}	@Minimum operating voltage to be 0 sec.	—	10	ms	
1 Sigma Jitter	J _{Sigma}	Measured with Wavecrest SIA-3000	—	3	ps	
Peak to Peak Jitter	J _{PK-PK}	125<fo≤160MHz	—	25		

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)

