

Clock Oscillators Surface Mount Type KC2520C-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.)
- High Stability Output Frequency
 $\pm 10 \times 10^{-6}$ (–10 to +70°C)
 $\pm 15 \times 10^{-6}$ (–40 to +85°C)
- 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	× 10 ⁻⁶	Operating Temperature Range (°C)	Note
Y	±10	–10 to +70	With only certain frequencies
K	±20	–40 to +85	Standard specifications
L	±15		

How to Order

KC2520C 40.0000 C 2 L 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

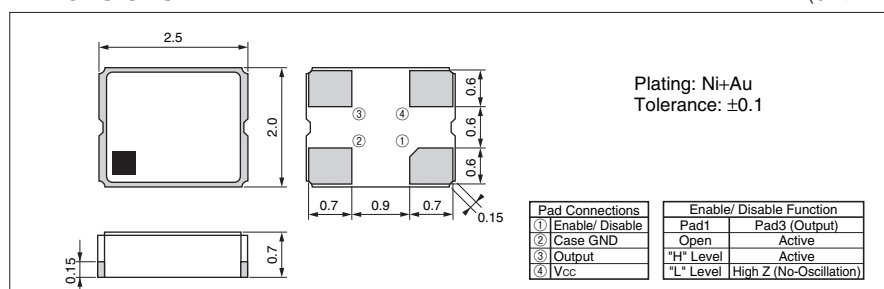
Item	Symbol	Conditions		Min.	Max.	Units
Output Frequency Range	f _o			1.5	50	MHz
Frequency Tolerance	f _{tol}	Initial tolerance, Operating temperature range, Rated power supply voltage change, Aging (1 year @25°C), Shock and vibration	Op. Temp.: –40 to +85°C	–15	+15	ppm
			Op. Temp.: –40 to +85°C	–20	+20	
			Op. Temp.: –10 to +70°C	–10	+10	
Storage Temperature Range	T _{stg}			–55	+125	°C
Operating Temperature Range	T _{use}			–10	+70	°C
				–40	+85	
Max. Supply Voltage	—			–0.6	+4	V
Supply Voltage	V _{CC}			2.25	3.63	V
Current Consumption (Maximum Loaded)	I _{CC}	No-load	1.5≤f _o <24MHz	—	3	mA
			24≤f _o ≤40MHz	—	3.5	
			40<f _o ≤50MHz	—	4	
		CL<15pF	1.5≤f _o <24MHz	—	3.5	
			24≤f _o ≤40MHz	—	5	
			40<f _o ≤50MHz	—	6	
Stand-by Current	I _{std}			—	5	μA
Symmetry	SYM	@ 50% V _{CC}	45	55	%	
Rise/ Fall Time (10% V _{CC} to 90% V _{CC} Maximum Loaded)	tr/ tf			—	4	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)

