

Clock Oscillators Surface Mount Type KC2520A-C1 Series



CMOS/ 1.8V/ 2.5×2.0mm



Pb Free

RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- CMOS output
- Supply voltage $V_{CC} = 1.8V$
Lower voltage available

Table 1

Freq. Tol. Code	$\times 10^{-6}$	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

KC2520A 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)
- 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)

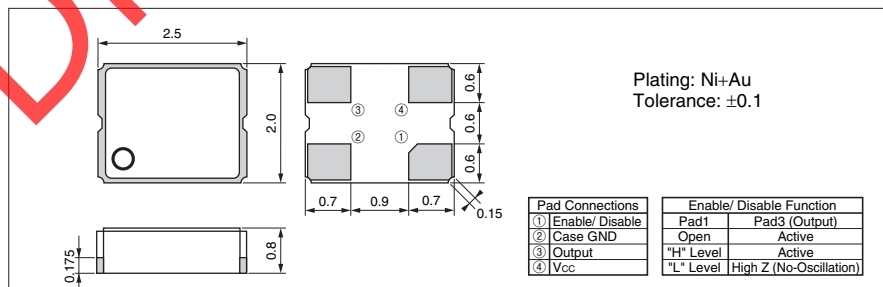
Specifications

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	×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	+7.0	V
Supply Voltage	V _{CC}	Freq. Tol.Code: 0, S, F		1.62	1.98	V
		Freq. Tol.Code: U, G		1.71	1.89	
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	1.8≤Fo≤26MHz		—	9	nS
		26<Fo≤50MHz		—	7	
Low Level Output Voltage	V _{OL}	I _{OL} =2mA		—	10% V _{CC}	V
High Level Output Voltage	V _{OH}	I _{OH} =-2mA		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}			—	3	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)

