

CMOS/ 2.5V, 3.3V Compatible/ 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. Code	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		
6	± 50	-40 to +105	

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/ INH Function (45/ 55%, Stand-by)
- ⑦ Customer Special Model Suffix (STD Specification is "00")

Packaging (Tape & Reel 2000 pcs./ reel)

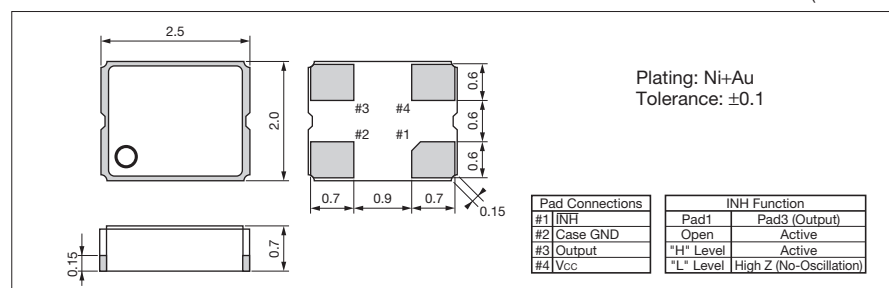
Specifications

Item	Symbol	Conditions		Specifications		Units
				Min.	Max.	
Output Frequency Range	f _o	f _o >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<f _o ≤160MHz		—	25	mA
Current Consumption (Maximum Loaded/ 2.75≤V _{CC} ≤3.63V)		125<f _o ≤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)	t _r / t _f	125<f _o ≤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<f _o ≤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.

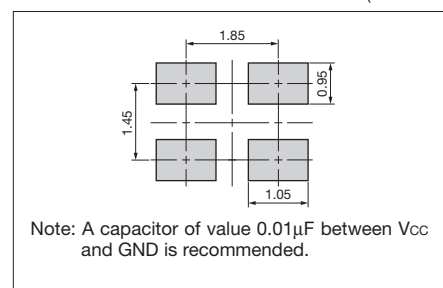
Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)



Mouser Electronics

Authorized Distributor

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