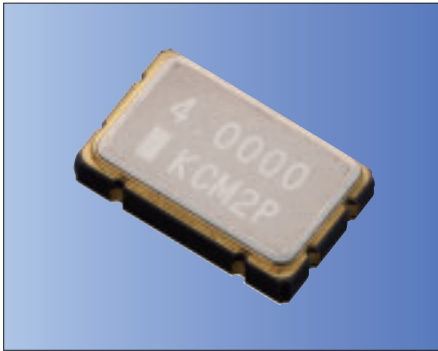




CMOS/ 1.8V to 3.3V/ 5.0×3.2mm



RoHS Compliant

Features

- Wide operating voltage range 1.6 to 3.3V
- ±25×10⁻⁶ available
- Highly reliable with seam welding
- Miniature ceramic package
- CMOS output

Table 1

| Freq. Tol. Code | Tol. × 10 ⁻⁶ | Operating Temperature Range (°C) | Note |
|-----------------|-------------------------|----------------------------------|--|
| 0 | ± 50 | -10 to +70 | Standard specifications |
| S | ± 30 | | |
| U | ± 25 | | |
| F | ±100 | -40 to +85 | Please contact us for available frequencies. |
| G | ± 50 | | |
| 6 | ± 50 | -40 to +105 | |

How to Order

KC5032A 100.000 C 1 □ E 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- 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/ INH Function (45/ 55%, Stand-by)
- ⑦ Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

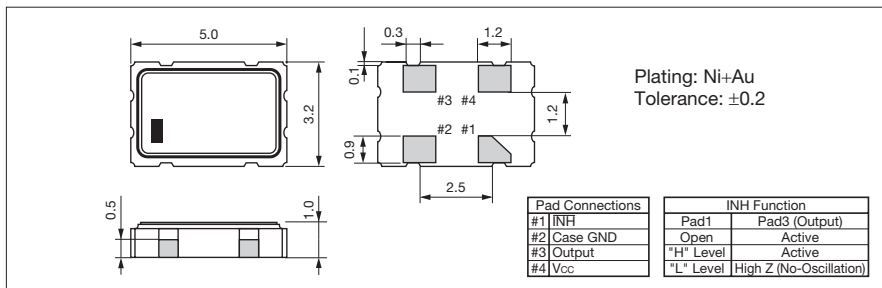
Specifications

| Item | Symbol | Conditions | Min. | Max. | Units | |
|---|--------------------|---|---|---------------------|-------|-------------------|
| Output Frequency Range | fo | fo>50MHz | 50 | 135 | 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 +105°C | -50 | +50 | |
| | | | Op. Temp.: -10 to +70°C | -30 | +30 | |
| | | | Op. Temp.: -10 to +70°C | -25 | +25 | |
| Storage Temperature Range | T _{stg} | Standard Specification | -55 | +125 | °C | |
| Operating Temperature Range | T _{use} | Standard Specification | -10 | +70 | °C | |
| | | Extend (Option) | -40 | +85 | | |
| Max. Supply Voltage | — | | -0.3 | +4.0 | V | |
| Supply Voltage | V _{cc} | | +1.6 | +3.63 | V | |
| Current Consumption (Loaded) (1.6<V _{cc} ≤2.0V) | I _{cc} | 50<fo≤85MHz | — | 10 | mA | |
| | | 85<fo≤105MHz | — | 15 | | |
| | | 105<fo≤135MHz | — | 16 | | |
| Current Consumption (Loaded) (2.0<V _{cc} ≤2.8V) | I _{cc} | 50<fo≤85MHz | — | 14 | | |
| | | 85<fo≤105MHz | — | 17 | | |
| | | 105<fo≤135MHz | — | 18 | | |
| Current Consumption (Loaded) (2.8<V _{cc} ≤3.63V) | I _{cc} | 50<fo≤85MHz | — | 17 | | |
| | | 85<fo≤105MHz | — | 19 | | |
| | | 105<fo≤135MHz | — | 22 | | |
| Stand-by Current | I _{std} | | — | 10 | μA | |
| Symmetry | SYM | @50% V _{cc} | 45 | 55 | % | |
| | | 1.6≤V _{cc} ≤2V | — | 3.5 | | |
| Rise/ Fall Time (10% V _{cc} to 90% V _{cc} Maximum Loaded) | tr/ tf | 2<V _{cc} ≤2.8V | — | 3.0 | ns | |
| | | 2.8<V _{cc} ≤3.63V | — | 2.5 | | |
| | | | — | 2.5 | | |
| Low Level Output Voltage | V _{OL} | | — | 10% V _{cc} | V | |
| High Level Output Voltage | V _{OH} | | 90% V _{cc} | — | V | |
| Output Load | L _{CMOS} | 1.6≤V _{cc} ≤3.63V | — | 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} | | — | 150 | 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 | 50<fo≤100MHz | — | 5 | ps |
| | | | 100<fo≤135MHz | — | 4 | |
| Peak to Peak Jitter | J _{PK-PK} | Measured with Wavecrest SIA-3000 | 50<fo≤100MHz | — | 40 | ps |
| | | | 100<fo≤135MHz | — | 30 | |

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)

