



RoHS Compliant

Features

- Wide operating voltage range 1.6 to 5.5V
- $\pm 25 \times 10^{-6}$ available
- Highly reliable with seam welding
- Miniature ceramic package
- CMOS output

Table 1

| Freq. Tol. Code | Tol. $\times 10^{-6}$ | 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 |
| S | ± 50 | | |

How to Order

KC5032A 25.0000 C M 0 E 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (5.0×3.2mm SMD)
- ② Output Frequency
- ③ Output Type (CMOS)
- ④ Supply Voltage (1.8V, 2.5V, 3.3V, 5V 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 1000 pcs./ reel)

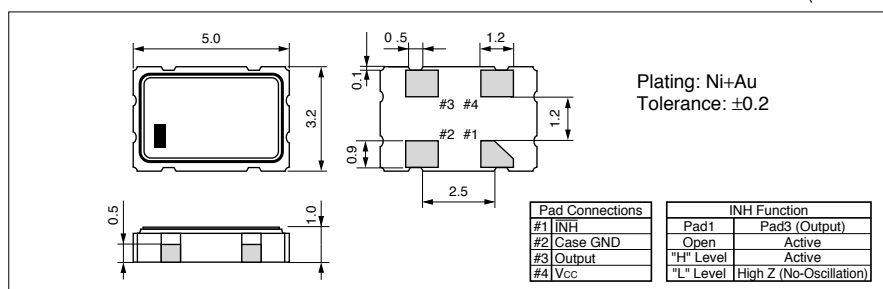
Specifications

| Item | Symbol | Conditions | Min. | Max. | Units | |
|--|-------------|---|--|--------------|---------|------------------|
| Output Frequency Range | f_o | | 1.789 | 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 | $\times 10^{-6}$ |
| | | | 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} | | -40 | +85 | °C | |
| Max. Supply Voltage | — | | -0.5 | +6.5 | V | |
| Supply Voltage | V_{CC} | | +1.6 | +5.5 | V | |
| Current Consumption | I_{CC} | $1.6 \leq V_{CC} \leq 2V$ | — | 5 | mA | |
| | | $2 < V_{CC} \leq 2.8V$ | — | 6 | | |
| | | $2.8 < V_{CC} \leq 3.63V$ | — | 7 | | |
| | | $4.5 \leq V_{CC} \leq 5.5V$ | — | 9.5 | | |
| 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) | t_r / t_f | $1.6 \leq V_{CC} \leq 2V$ | — | 8 | ns | |
| | | $2 < V_{CC} \leq 2.8V$ | — | 7 | | |
| | | $2.8 < V_{CC} \leq 3.63V$ | — | 6 | | |
| | | $4.5 \leq V_{CC} \leq 5.5V$ | — | 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} | $1.6 \leq V_{CC} \leq 3.63V$ | — | 15 | pF | |
| | | $4.5 \leq V_{CC} \leq 5.5V$ | — | 50 | | |
| 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 DTS-2079 VISI/ 6.3.1 | — | 8 | ps | |
| Peak to Peak Jitter | J_{PK-PK} | | — | 80 | ps | |

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)

