

SAW Clock Oscillators Surface Mount Type KC7050T-P3 Series



LV-PECL/ 3.3V/ 7.0x5.0mm



RoHS Compliant

Features

- Low jitter
- Complementary LV-PECL outputs
- Operation at fundamental high frequency
- $\pm 50 \times 10^{-6}$ Available

Table 1

| Freq. Tol. Code | $\times 10^{-6}$ | Operating Temperature Range (°C) | Note |
|-----------------|------------------|----------------------------------|-------------------------------|
| 1 | ± 100 | 0 to +70 | Standard specifications |
| 0 | ± 50 | | With only certain frequencies |
| A | ± 100 | -5 to +85 | |

How to Order

KC7050T 312.500 P 3 1 E 00
① ② ③ ④ ⑤ ⑥ ⑦

- ① Type (7.0x5.0mm SMD)
- ② Output Frequency
- ③ Output Type (PECL)
- ④ Supply Voltage (3.3V)
- 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 ^{Note1} | f _o | | 125 | 700 | 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.: 0 to +70°C | -50 | +50 | $\times 10^{-6}$ |
| | | | Op. Temp.: 0 to +70°C | -100 | +100 | |
| | | | Op. Temp.: -5 to +85°C | -100 | +100 | |
| Storage Temperature Range | T _{stg} | | -55 | +125 | °C | |
| Operating Temperature Range | T _{use} | Standard Specifications | 0 | +70 | °C | |
| Max. Supply Voltage | — | | -0.5 | +5 | V | |
| Supply Voltage | V _{CC} | 3.3V | 2.97 | 3.63 | V | |
| Current Consumption (Standard Loaded) | I _{CC} | | — | 90 | mA | |
| Symmetry | SYM | | 45 | 55 | % | |
| Rise/ Fall Time (20% to 80% Output Level Standard Loaded) | tr/ tf | | — | 600 | pS | |
| Low Level Output Voltage ^{Note2} | V _{OL} | 0 to +85°C/ Typ. 1.600V | V _{CC} -1.810 | V _{CC} -1.620 | V | |
| | | -5 to 0°C/ Typ. 1.605V | V _{CC} -1.830 | V _{CC} -1.555 | | |
| High Level Output Voltage ^{Note2} | V _{OH} | 0 to +85°C/ Typ. 2.350V | V _{CC} -1.025 | V _{CC} -0.880 | V | |
| | | -5 to 0°C/ Typ. 2.295V | V _{CC} -1.085 | V _{CC} -0.900 | | |
| Output Load | RL | LV-PECL Output | 50 | | ohm | |
| 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} | | — | 200 | nS | |
| Enable Time | t _{ena} | | — | 10 | mS | |
| Start-up Time | t _{str} | @Minimum operating voltage to be 0 sec. | — | 10 | mS | |
| Deterministic Jitter (DJ) | DJ | Measured with Wavecrest DTS-2079 VIS/ 6.3.1 | 0.2 typ. | | pS | |
| 1 Sigma Jitter | J _{Sigma} | | 2 typ. | | pS | |
| Peak to Peak Jitter | J _{PK-PK} | | 20 typ. | | pS | |

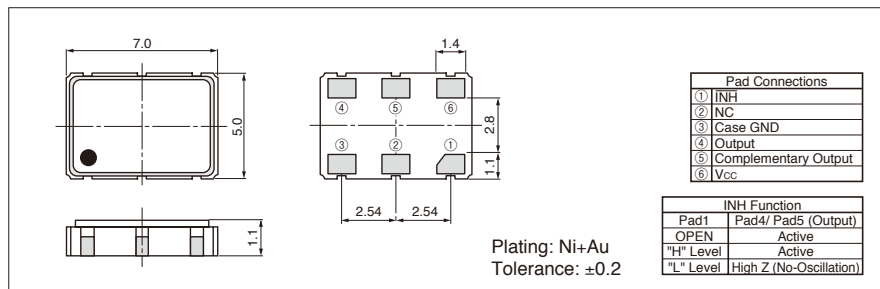
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

Note1: Please contact us for inquiry about operating temperature range, available frequencies and other conditions.

Note2: DC characteristic

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

