



LV-PECL or LVDS/ 3.3V or 2.5V/ 5.0x3.2mm



RoHS Compliant

Features

- High frequency to 900MHz
- LV-PECL output or LVDS output
- Miniature ceramic package
- Compact and low profile (5.0x3.2x1.2mm max.)
- Low current consumption

Applications

- WDM/ Networking

Table 1

| Freq. Code | Tol. $\times 10^{-6}$ | Operating Temperature Range (°C) | Note |
|------------|-----------------------|----------------------------------|--|
| G | ± 50 | -40 to +85 | Please contact us for available frequencies. |

How to Order

KC5032R 622.080 G D 00
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Output Frequency
- ③ Output Type (P : LV-PECL or L : LVDS)
- ④ Supply Voltage (3 : 3.3V or 2 : 2.5V)
- ⑤ Frequency Tolerance (See Table 1)
- ⑥ Symmetry/ INH Function (45/ 55%, Disable)
- ⑦ Individual Specification (STD Specification is "00")

Packaging (Tape & Reel 1000 pcs./ reel)

Specifications

| Item | Symbol | Conditions | Min. | Max. | Units | |
|--|--------------------|--|------------------------|------------------------|------------------|-----------|
| Output Frequency Range ^{Note1} | f _o | | 10 | 900 | 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 | -50 | +50 | $\times 10^{-6}$ | |
| Storage Temperature Range | T _{stg} | | -55 | +125 | °C | |
| Operating Temperature Range | T _{use} | | -40 | +85 | °C | |
| Max. Supply Voltage | — | | -0.5 | +4.2 | V | |
| Supply Voltage | V _{cc} | | +2.25 | +2.75 | V | |
| Current Consumption | I _{cc} | LV-PECL Output (2.25≤V _{cc} ≤2.75V) | — | 80 | mA | |
| | | LV-PECL Output (2.97<V _{cc} <3.63V) | — | 100 | | |
| | | LVDS Output (2.25≤V _{cc} ≤2.75V, 2.97≤V _{cc} ≤3.63V) | — | 40 | | |
| Symmetry | SYM | LV-PECL Output 50ohm @crossing point | 45 | 55 | % | |
| | | LVDS Output 100ohm @crossing point | 45 | 55 | | |
| Rise/ Fall Time (20% to 80% Output Level) | tr/ tf | LV-PECL Output 50ohm | — | 0.4 | ns | |
| | | LVDS Output 100ohm | — | 0.6 | | |
| Low Level Output Voltage ^{Note2} | V _{OL} | LV-PECL Output | — | V _{cc} -1.025 | V | |
| High Level Output Voltage ^{Note2} | V _{OH} | | V _{cc} -1.025 | — | V | |
| Output Load | — | | 50 | — | ohm | |
| Low Level Output Voltage ^{Note2} | V _{OL} | Typ. 1.1V | 0.9 | — | V | |
| High Level Output Voltage ^{Note2} | V _{OH} | Typ. 1.43V | — | 1.6 | V | |
| Differential Output Voltage ^{Note2} | V _{OD} | Typ. 330mV | 175 | 454 | mV | |
| Differential Output Voltage Error ^{Note2} | dV _{OD} | dV _{OD} = V _{OD1} -V _{OD2} | — | 50 | mV | |
| Offset Voltage | V _{OS} | Typ. 1.25V | 1.125 | 1.375 | V | |
| Offset Voltage Error | dV _{OS} | dV _{OS} = V _{OS1} -V _{OS2} | — | 50 | mV | |
| Output Load | — | | 100 | — | ohm | |
| Low Level Input Voltage ^{Note2} | V _{IL} | | — | 30% V _{cc} | V | |
| High Level Input Voltage ^{Note2} | V _{IH} | | 70% V _{cc} | — | V | |
| Disable Time | t _{dis} | | — | 200 | ns | |
| Enable Time | t _{ena} | | — | 2 | ms | |
| Start-up Time | t _{str} | @Minimum operating voltage to be 0 sec. | — | 10 | ms | |
| Phase Jitter | J _{Phase} | @622.08MHz | BW : 12kHz to 20MHz | | ps | |
| Phase Noise | — | @622.08MHz | @10Hz offset | | | Typ. -40 |
| | | | @100Hz offset | | | Typ. -70 |
| | | | @1kHz offset | | | Typ. -95 |
| | | | @10kHz offset | | | Typ. -105 |
| | | | @100kHz offset | | | Typ. -105 |
| | | | @1MHz offset | | | Typ. -125 |
| | | | @10MHz offset | | Typ. -135 | |

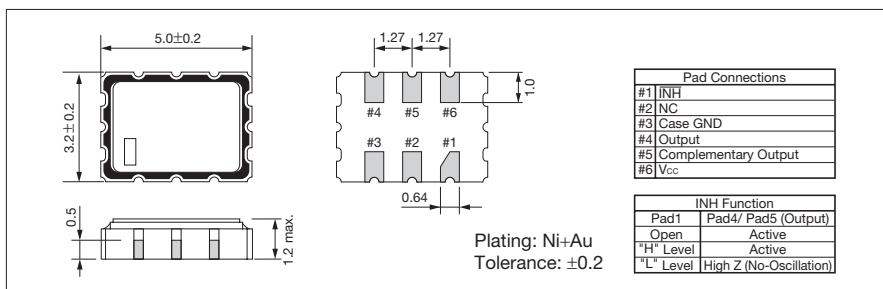
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

