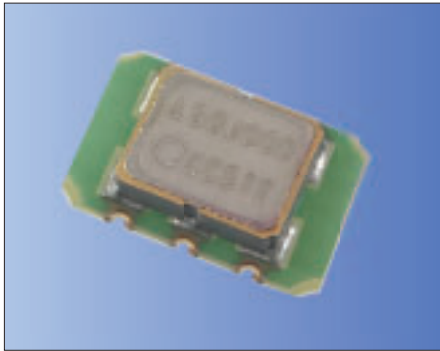


LV-PECL/ 3.3V or 2.5V/ 5.0×3.2mm



RoHS Compliant

Features

- Miniature ceramic package
- Highly reliable with seam welding
- LV-PECL output
- Supply voltage Vcc = 3.3V, 2.5V
- ±25×10⁻⁶ available
- Low Phase Noise

Table 1

| Freq. Tol. Code | Tolerance × 10 ⁻⁶ | Operating Temperature Range (°C) | Note |
|-----------------|------------------------------|----------------------------------|--|
| 0 | ± 50 | 0 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

KC5032L 100.000 P □ G J 00
 ① ② ③ ④ ⑤ ⑥ ⑦

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

Packaging (Tape & Reel 1000 pcs./ reel)

Specifications

| Item | Symbol | Conditions | Specifications | | Units |
|---|--------------------|---|--|----------------|---------|
| | | | KC5032L-P2 | KC5032L-P3 | |
| Output Frequency Range ^{Note1} | f _o | | 25 to 170 | | 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 | ±50/ -40 to +105°C | | ppm |
| | | | ±100/ -40 to +85°C | | |
| | | | ±50/ -40 to +85°C | | |
| | | | ±50/ 0 to +70°C | | |
| | | | ±30/ 0 to +70°C | | |
| Storage Temperature Range | T _{stg} | | -55 to +125 | | °C |
| Operating Temperature Range | T _{use} | Standard Specifications | 0 to +70/ -40 to +85 | | °C |
| | | Extend (Option) | -40 to +105 | | |
| Max. Supply Voltage | — | | -0.3 to +4.0 | | V |
| Supply Voltage | V _{cc} | | +2.25 to +2.75 | +2.97 to +3.63 | V |
| Current Consumption | I _{cc} | ≤156.25MHz | 60 max. | | mA |
| | | 156.25MHz< | 70 max. | | |
| Stand-by Current | I _{std} | | 20 max. | | μA |
| Symmetry | SYM | 50ohm @crossing point | 50±5 | | % |
| Rise/ Fall Time (20% V _{cc} to 80% V _{cc} Maximum Loaded) | tr/ tf | 50ohm | 0.6 max. (V _{cc} : 2.25 to 2.75V) 0.4 max. (V _{cc} : 2.97 to 3.63V) | | ns |
| Low Level Output Voltage ^{Note2} | V _{OL} | | V _{cc} -1.810 to V _{cc} -1.620 | | V |
| High Level Output Voltage ^{Note2} | V _{OH} | | V _{cc} -1.025 to V _{cc} -0.880 | | V |
| Output Load | RL | | 50 | | ohm |
| Input Voltage Range | V _{IN} | | 0 to V _{cc} | | V |
| Low Level Input Voltage | V _{IL} | | 30% V _{cc} max. | | V |
| High Level Input Voltage | V _{IH} | | 70% V _{cc} min. | | V |
| Disable Time | t _{dis} | | 150 max. | | ns |
| Enable Time | t _{ena} | | 10 max. | | ms |
| Start-up Time | t _{str} | @Minimum operating voltage to be 0 sec. | 10 max. | | ms |
| Deterministic Jitter | DJ | Measured with Wavecrest SIA-3000 | 2 max. | | ps |
| 1 Sigma Jitter | J _{sigma} | | 4 max. | | ps |
| Peak to Peak Jitter | J _{PK-PK} | | 30 max. | | ps |
| Phase Jitter | J _{Phase} | @156.25MHz V _{cc} = 3.3V | BW : 12kHz to 20MHz | 0.3max. | ps |
| Phase Noise | — | @156.25MHz V _{cc} = 3.3V | @10Hz offset | Typ. -77 | dBc/ Hz |
| | | | @100Hz offset | Typ. -103 | |
| | | | @1kHz offset | Typ. -133 | |
| | | | @10kHz offset | Typ. -143 | |
| | | | @100kHz offset | Typ. -149 | |
| | | | @1MHz offset | Typ. -149 | |
| @10MHz offset | Typ. -154 | | | | |

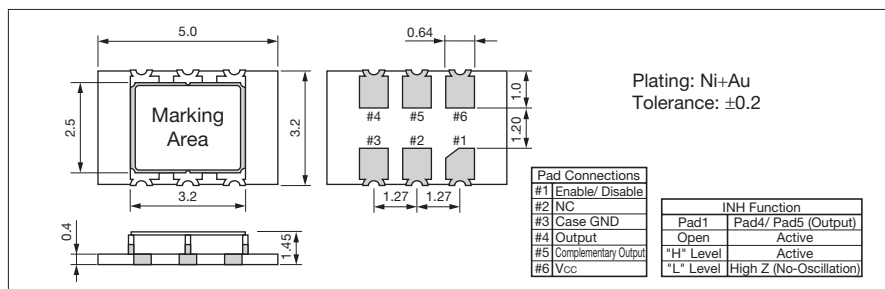
Note : All electrical characteristics are defined at the maximum load and operating temperature range.

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)

