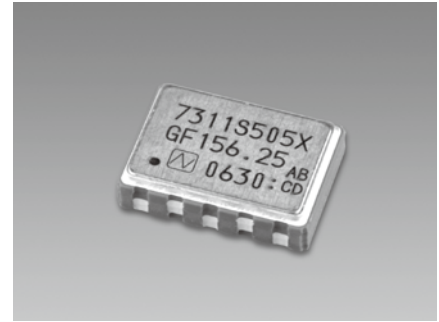


■ Main Application

For SONET-, SDH-, and GbEthernet-related equipment

■ Features

- LVPECL output level
- Supports a wide frequency range(220 to 313MHz).
- Low phase jitter : Max. 1ps



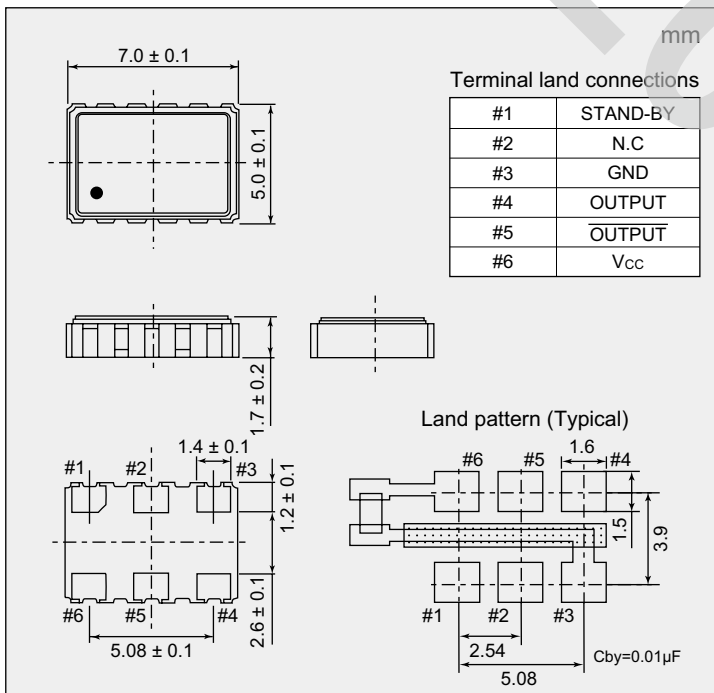
Pb Free

RoHS Compliant
Directive 2011/65/EU

■ Specifications

| Item | Model | 7311S | | | |
|---------------------------------------|-----------------------|--------------------------------|------------------------------|-----------------------------|------------------------------|
| Nominal Frequency Range (MHz) | | 220 to 313 | | | |
| Supply Voltage [V _{cc}] (V) | | +2.5 ± 5 % | | +3.3 ± 10 % | |
| Load Resistance (Ω) | | 50 (to V _{cc} -2.0 V) | | | |
| Current Consumption | During Operation (mA) | Max. 88 (Typ. 55) | | Max. 90 (Typ. 60) | |
| | During Standby (μA) | Max. 30 | | | |
| Output Level | | LVPECL (Complementary) | | | |
| Operating Temperature Range (°C) | | 0 to +85, | | -40 to +85 | |
| Storage Temperature Range (°C) | | -55 to +125 | | | |
| Frequency Tolerance | | Max. ±50 × 10 ⁻⁶ | Max. ±100 × 10 ⁻⁶ | Max. ±50 × 10 ⁻⁶ | Max. ±100 × 10 ⁻⁶ |
| Symmetry (%) | | 45 to 55 (at 50% Waveform) | | | |
| Phase Jitter [RMS] (ps) | | Max. 1 (12 kHz to 20 MHz) | | | |
| Stand-by function [Three-state] | | Available | | | |

■ Dimensions



■ Standby Function Table (Three-state)

| #1 Input | #4 and #5 output |
|---|-----------------------|
| Level H (V _{IH} ≥ 0.7 V _{cc}) or OPEN | Oscillation output ON |
| Level L (V _{IL} ≤ 0.3 V _{cc}) | High impedance |

■ Specification Number

Supply Voltage : +2.5V

| Frequency Tolerance | Operating Temp. Range (°C) | Classification | Specification Number |
|----------------------------|----------------------------|----------------|----------------------|
| Max. ±50×10 ⁻⁶ | 0 to +85 | GF-505X | NSA3345F |
| | -40 to +85 | GF-505P | NSA3345F |
| Max. ±100×10 ⁻⁶ | 0 to +85 | GF-104X | NSA3346F |
| | -40 to +85 | GF-104P | NSA3346F |

Supply Voltage : +3.3V

| Frequency Tolerance | Operating Temp. Range (°C) | Classification | Specification Number |
|----------------------------|----------------------------|----------------|----------------------|
| Max. ±50×10 ⁻⁶ | 0 to +85 | DF-505X | NSA3345E |
| | -40 to +85 | DF-505P | NSA3345E |
| Max. ±100×10 ⁻⁶ | 0 to +85 | DF-104X | NSA3346E |
| | -40 to +85 | DF-104P | NSA3346E |