

Model Name 7311S-GF

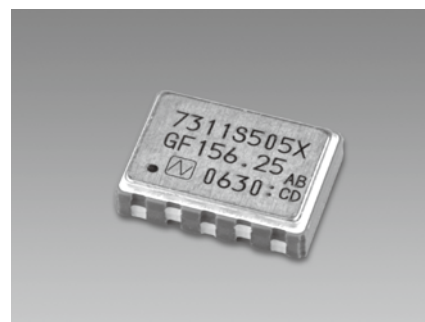
Simple Packaged Crystal Oscillator (SPXO) 7300 Series

■ Main Application

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

■ Features

- Low power supply voltage (2.5 V)
- LVPECL output level.
- Supports a wide frequency range (62.5 to 313MHz).
- Low phase jitter : Max. 1ps
- Compact with dimensions of 7.0 x 5.0 x 1.7 mm.



Pb
Free

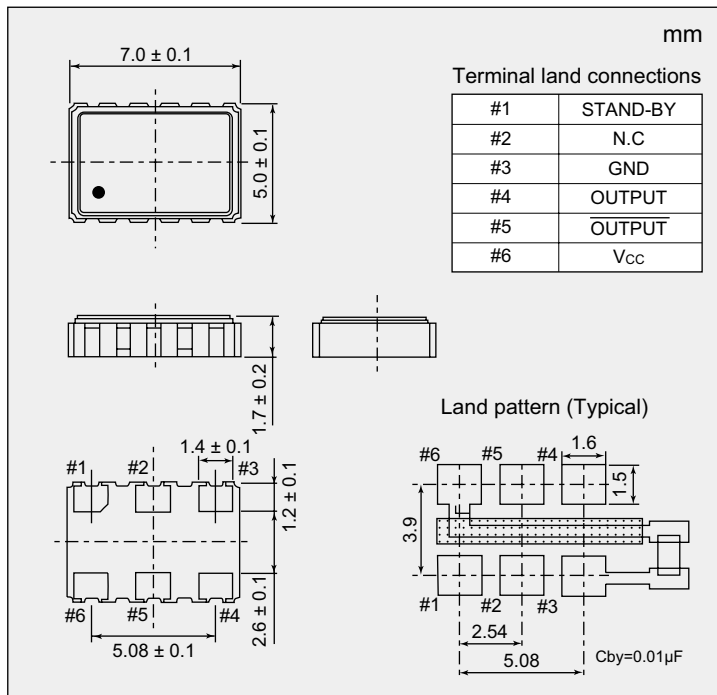
RoHS Compliant
Directive 2011/65/EU

■ Specifications

Item	Model Classification		7311S				
	GF-255R	GF-505X	GF-104X	GF-505P	GF-104P		
Nominal frequency range (MHz)	62.5 to 220						
Supply voltage [V _{cc}] (V)	+2.5 ± 5 %						
Load resistance	50 Ω (to V _{cc} -2.0 V)						
Current consumption	During operation		Max. 88 mA (Typ. 55 mA)				
	During standby		Max. 30 μA				
Output level	LVPECL (Complementary)						
Operating temperature range	0 to +70°C	0 to +85°C		-40 to +85°C			
Storage Temperature Range	-55 to +125°C						
Frequency tolerance	Max. ±25×10 ⁻⁶	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)	Max. 1ps (12 kHz to 20 MHz)						
Stand-by function (Three-state)	Available						
Number for specifying an order	NSA3344B	NSA3345B	NSA3346B	NSA3345K	NSA3346K		

Item	Model Classification		7311S			
	GF-505X	GF-104X	GF-505P	GF-104P		
Nominal frequency range (MHz)	220 to 313					
Supply voltage [V _{cc}] (V)	+2.5 ± 5 %					
Load resistance	50 Ω (to V _{cc} -2.0 V)					
Current consumption	During operation		Max. 88 mA (Typ. 55 mA)			
	During standby		Max. 30 μA			
Output level	LVPECL (Complementary)					
Operating temperature range	0 to +85°C		-40 to +85°C			
Storage Temperature Range	-55 to +125°C					
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)	Max. 1ps (12 kHz to 20 MHz)					
Stand-by function (Three-state)	Available					
Number for specifying an order	NSA3345F	NSA3346F	NSA3345F	NSA3346F		

■ Dimensions



■ Standby Function Table (Three-state)

#1 Input	#4 and #5 output
Level H ($V_{IH} \geq 0.7 V_{CC}$) or OPEN	Oscillation output ON
Level L ($V_{IL} \leq 0.3 V_{CC}$)	High impedance

■ How to Specify an Order

When ordering our products, specify them with an "Ordering Code" that consists of the following:

Model name – Frequency (up to 8 digits) M – Number for specifying an order

Example :When ordering +2.5 V, Max. $\pm 100 \times 10^{-6}/0$ to 85 °C, 156.25 MHz

Ordering Code: 7311S-GF-104X-156.25M-NSA3346B

If you have any queries concerning our standard frequencies and numbers for specifying orders, please contact our sales representatives or visit our homepage (<http://www.ndk.com/>).