

### Main Application

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

### Features

- Low power supply voltage (3.3V)
- LVDS output level.
- Low phase jitter : Max. 1ps
- Ultra-compact with dimensions of 7.0 x 5.0 x 1.7 mm.



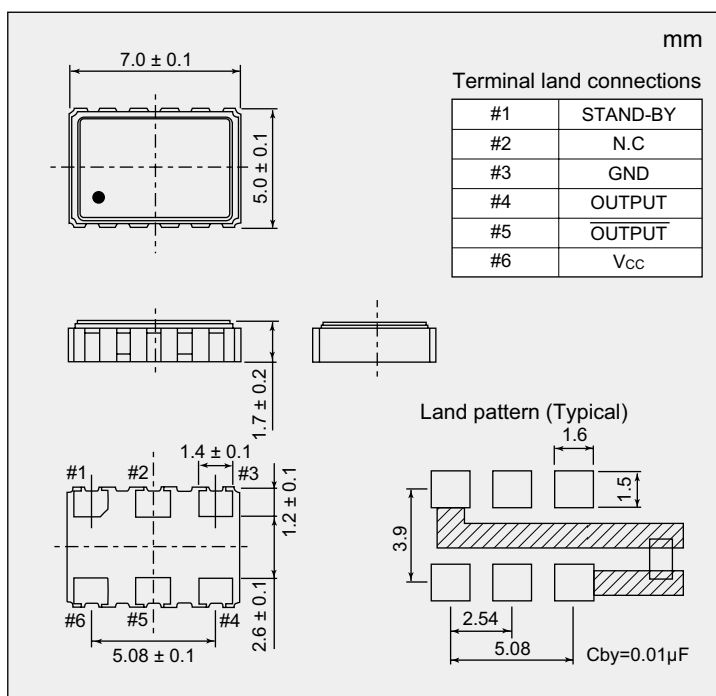
Pb Free

RoHS Compliant  
Directive 2002/95/EC

### Specifications

Item	Model Classification	7311S				
		DG-255R	DG-505X	DG-104X	DG-505P	DG-104P
Nominal frequency range (MHz)		62.5 to 220				
Supply voltage [V <sub>cc</sub> ] (V)		+3.3 ± 10 %				
Load resistance		100 Ω (Pad #4 - #5)				
Current consumption	During operation	Max. 60 mA (Typ. 43 mA)				
	During standby	Max. 30 μA				
Output level		LVDS level (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 <sup>-6</sup>	Max. ±50 ×10 <sup>-6</sup>	Max. ±100 ×10 <sup>-6</sup>	Max. ±50 ×10 <sup>-6</sup>	Max. ±100 ×10 <sup>-6</sup>
Symmetry		40 % to 60 % (at 50% Waveform)				
Phase jitter (RMS)		Max. 1ps (12 kHz to 20 MHz)				
Stand-by function (tristate)		Available				
Number for specifying an order		NSA3344C	NSA3345C	NSA3346C	NSA3345L	NSA3346L

### Dimensions



### Standby Function Table (Tristate)

#1 Input	#4 and #5 output
Level H (V <sub>IH</sub> ≥ 0.7 V <sub>cc</sub> ) or OPEN	Oscillation output ON
Level L (V <sub>IL</sub> ≤ 0.3 V <sub>cc</sub> )	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
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Example : When ordering +3.3 V,  
Max. ±100×10<sup>-6</sup>/0 to 85 °C, 125 MHz  
Ordering Code: 7311S-DG-104X-125M-NSA3346C

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/>).