

Crystal Oscillator

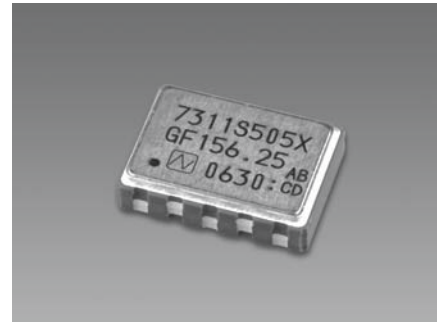
Model Name 7311S-DF Simple Packaged Crystal Oscillator (SPXO) 7300 Series

Main Application

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

Features

- Power supply voltage and LV-PECL output level are 3.3 V and 62.5 to 350 MHz, respectively.
- Ultra-compact with dimensions of 7.0 x 5.0 x 1.7 mm.
- Surface-mount crystal oscillator.



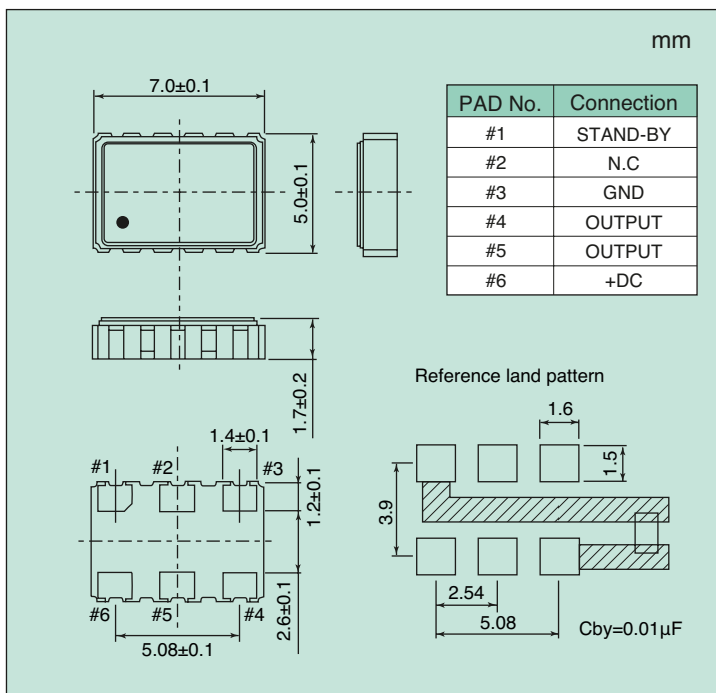
Pb Free

RoHS Compliant
Directive 2002/95/EC

Specifications

Item	Model Classification	7311S-DF-XXXX	
		XXXX : 255R, 505X, 104X	
Standard nominal frequency (MHz)		62.5 to 220	220 to 350
Power supply voltage		+3.3V DC $\pm 10\%$	
Load		50 Ω	
Operating temperature range		0 to 70°C, 0 to 85°C	0 to 85°C
Comprehensive frequency stability		$\pm 25 \times 10^{-6}$ max/0 to 70°C (255R)	$\pm 50 \times 10^{-6}$ max/0 to 85°C (505X)
		$\pm 50 \times 10^{-6}$ max/0 to 85°C (505X)	$\pm 100 \times 10^{-6}$ max/0 to 85°C (104X)
		$\pm 100 \times 10^{-6}$ max/0 to 85°C (104X)	
Consumption current	During operation	60mA typ. (90mA max)	
	During standby	30 μ A max.	
Output level		PECL level (Complementary)	
Duty cycle		45 to 55% (at Waveform)	
Phase jitter (1 σ)		1ps max. (12KHz to 20MHz)	
Standby function (tristate)		Available	

Dimensions



Standby Function Table (Tristate)

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

Number for specifying an order (+3.3V LV-PECL)

Comprehensive frequency stability	Nominal frequency range (MHz)	
	$62.5 \leq F < 220$	$220 \leq F < 350$
$\pm 25 \times 10^{-6}$ max/0 to 70°C	NSA3344A	-
$\pm 50 \times 10^{-6}$ max/0 to 85°C	NSA3345A	NSA3345E
$\pm 100 \times 10^{-6}$ max/0 to 85°C	NSA3346A	NSA3346E

How to Specify an Order

Model name	-	Frequency (up to 9 digits)	M	-	Number for specifying an order
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When ordering +3.3V, $\pm 100 \times 10^{-6}$ max/0 to 85°C, 156.25MHz 7311S-DF-104X-156.250000M-NSA3346A

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/>).