

# Crystal Oscillator

## Model Name NT3225SA Temperature-Compensated Crystal Oscillator (TCXO) NT3225S Series

### Main Application

For mobile phones, etc.

### Features

- Supports low power supply voltage. (Supports DC +2.4 V±0.1 V to +3.4 V±5 %.)
- Ultra-compact and light with a height, cubic volume, and weight of Max. 1.0 mm, 0.007 cm<sup>3</sup>, and 0.024 g, respectively.
- Low power consumption.
- A surface-mount crystal oscillator. (Reflow soldering is possible.)
- Lead-free. Meets the requirements for re-flow profiling using lead-free solder.



Pb Free

RoHS Compliant  
Directive 2002/95/EC

### Specifications

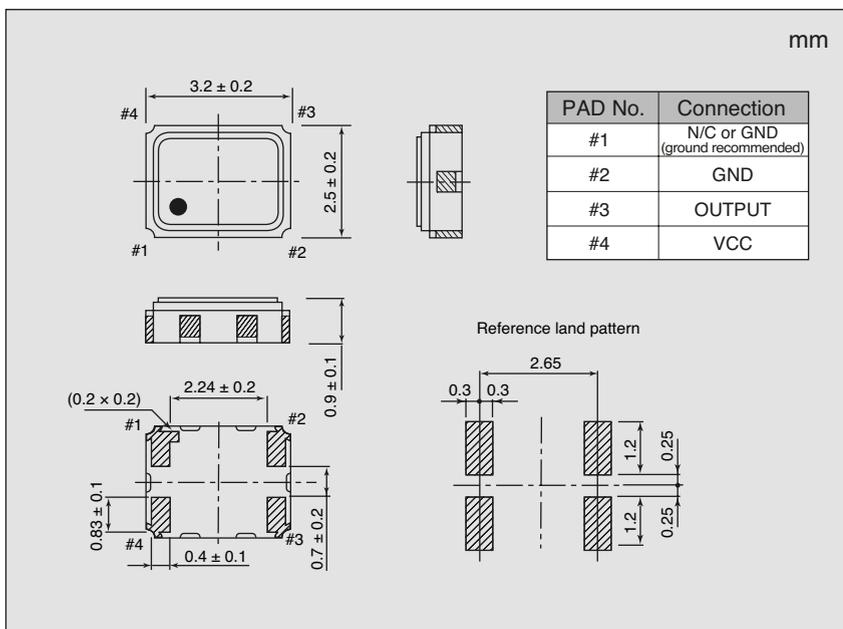
Item	Model	NT3225SA
Standard nominal frequency (MHz)		10 to 26
Supply voltage [VCC] (V)		+3.0
Load		10 kΩ/10 pF
Current consumption (mA)		Max. 1.5
Output voltage		Min. 0.8 V(P-P) (DC Coupling *1)
Frequency stability		Max. ±2.5×10 <sup>-6</sup>
Operating temperature range (°C)		-30 to +75
Supply variation		Max. ±0.3×10 <sup>-6</sup> /+3.0 V±5 %
Load variation		Max. ±0.2×10 <sup>-6</sup> /(10 kΩ/10 pF) ±10 %
Aging		Max. ±1.0×10 <sup>-6</sup> /year

#### Frequency setting conditions

1. Frequencies are set at normal temperatures (+25±2 °C).
  2. Frequencies are set with a printed board that has a ground pattern attached to the underside of an oscillator.
- If you require a product with a different frequency, power supply voltage, frequency control characteristic, etc. to the standard specifications, please contact us with your enquiries.

\*1. A DC-cut capacitor is not embedded in this crystal oscillator. Connect a DC-cut capacitor (1,000 pF) to the line-out terminal of the oscillator.

### Dimensions



### List of Ordering Codes

Frequency (MHz)	Ordering Code
10	NT3225SA-10M-NSA0322A
12.8	NT3225SA-12.8M-NSA0322A
16.3676	NT3225SA-16.3676M-NSA0322A
16.37	NT3225SA-16.37M-NSA0322A
19.2	NT3225SA-19.2M-NSA0322B
19.68	NT3225SA-19.68M-NSA0322B
26	NT3225SA-26M-NSA0322B

The above frequencies are NDK's standard frequencies. Frequencies other than the above are available. Feel free to contact our sales representatives.