

2725 Series

Power-saving Type

Model name

2725Q Frequency stability of $\pm 100 \times 10^{-6}$.

Application

- For compact mobile information equipment, such as DVC, DSC, notebook PC, and PDA

Features

- A power saving-type crystal oscillator, capable of being driven by a 2.5 V. power supply.
- Automatic mounting by taping and IR reflow (lead-free) are possible.
- Lead-free.
- Compact and light with the following dimensions and weight of 5.0 x 3.2 mm, 1.0 mm, and 0.06 g.

Pb Free

RoHS Compliant
Directive 2002/95/EC



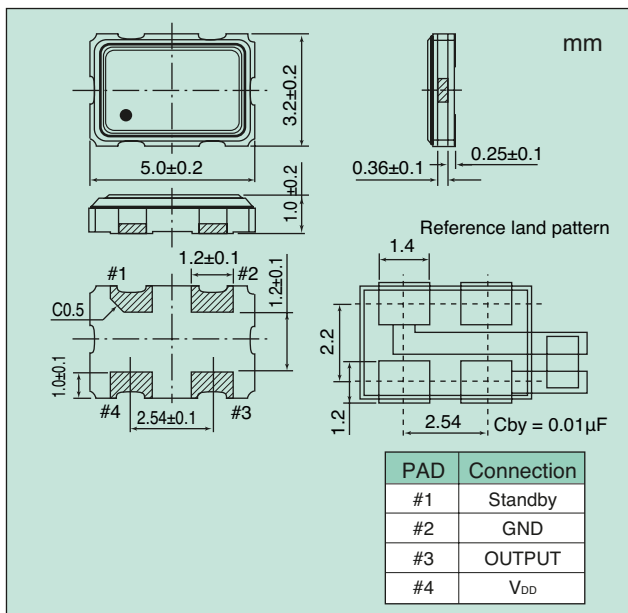
Absolute maximum rating
Power supply voltage (V_{DD}) -0.5 to +7.0V DC
Storage temperature range -55 to +125°C

Specifications

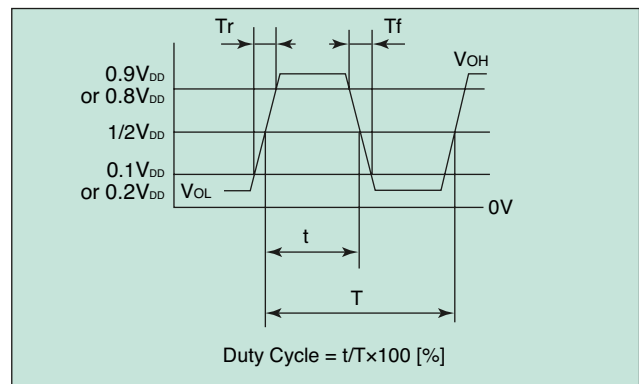
| Item | Model | 2725Q | | | | | | |
|---|----------------------|---|-----------------|------------------|------------------|------------------|----------------------|---|
| Output level | | C-MOS | | | | | | |
| Frequency range ^{*1} | (MHz) | $2.5 \leq F < 5$ | $5 \leq F < 10$ | $10 \leq F < 20$ | $20 \leq F < 40$ | $40 \leq F < 75$ | $75 \leq F \leq 125$ | |
| Operating temperature range ^{*2} | (°C) | -20 to +70 | | | | | | |
| Frequency stability | ($\times 10^{-6}$) | ± 100 | | | | | | |
| Power supply voltage | (V) | +2.5 \pm 0.1 | | | | | | |
| Consumption current (+3.3V, 25°C) max | During operation | (mA) | 2 | 3 | 4 | 6 | 16 | 24 |
| | During standby | (μ A) | 10 | | | | | |
| V_{OL} max/ V_{OH} min | (V) | 0.1 V_{DD} /0.9 V_{DD} I_{OL} =4mA I_{OH} =-4mA | | | | | | 0.2 V_{DD} /0.8 V_{DD} I_{OL} =4mA I_{OH} =-4mA |
| T_r max/ T_f max | (ns) | 5/5 (0.1 V_{DD} to 0.9 V_{DD}) | | | | | | 4/4 (0.2 V_{DD} to 0.8 V_{DD}) |
| Duty Cycle min. to max. | (%) | 40 to 60 (at 1/2 V_{DD}) | | | | | | |
| Load (C_L) max | (pF) | 15 | | | | | | |
| Oscillation start time max | (ms) | 10 | | | | | | |
| Standby function | | Available (tristate) | | | | | | |
| Number for specifying an order | | NSA6296A | | | | | | |

*1: If you require a product with a frequency not given above, please contact us. *2: If you require a product with an operating temperature range not given above, please contact us.

Dimensions



Output Waveform <C-MOS>



Standby Function

| #1 Input | #3 Output |
|--|-----------------------|
| Level H ($0.7 V_{DD} \leq V_{IH} \leq V_{DD}$) or OPEN is selected. | Oscillation output ON |
| Level L ($V_{IL} \leq 0.3 V_{DD}$) is selected. | 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 9 digits)]M - [Number for specifying an order]

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/>).

Example 1: When ordering a product with model name: 2725Q, frequency: 125 MHz, frequency stability: $\pm 100 \times 10^{-6}$, and power supply voltage: 2.5 V
Ordering Code: 2725Q - 125.000000M - NSA6296A