

## 2725 Series

## Power-saving Type

### Model name

2725Q Frequency stability of  $\pm 50 \times 10^{-6}$ .

### 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



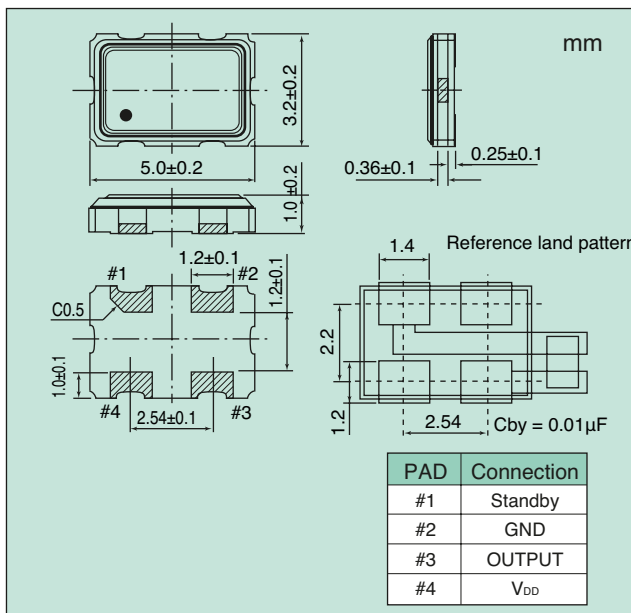
Absolute maximum rating  
Power supply voltage ( $V_{DD}$ ) -0.5 to +7.0V DC  
Storage temperature range -55 to +125°C

### Specifications

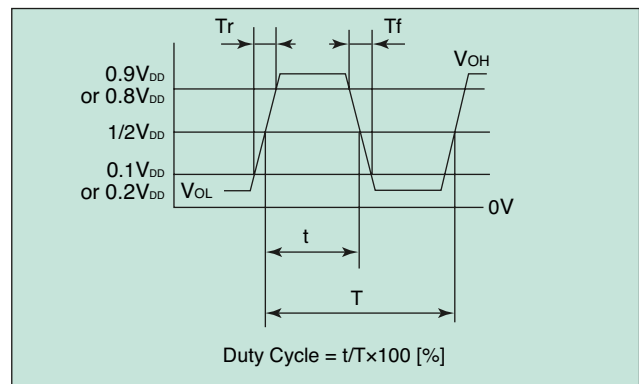
Item	Model	2725Q						
Output level		C-MOS						
Frequency range <sup>*1</sup>	(MHz)	$2.5 \leq F < 5$	$5 \leq F < 10$	$10 \leq F < 20$	$20 \leq F < 40$	$40 \leq F < 75$	$75 \leq F \leq 125$	
Operating temperature range <sup>*2</sup>	(°C)	-10 to +70						
Frequency stability	( $\times 10^{-6}$ )	$\pm 50$						
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	( $\mu$ 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		NSA6296B						

\*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:  $\pm 50 \times 10^{-6}$ , and power supply voltage: 2.5 V  
Ordering Code: 2725Q - 125.000000M - NSA6296B