Crystal Clock Oscillator

Crystal Bridge to the Future

2725 Series High Frequency-supporting Type

■ Model name

2725T Frequency stability of ±100 x 10^{-6}.

■ Application

- For notebook PC, mobile information terminal, and PC card

■ Features

- Supports a frequency range of 2.5 to 125 MHz.
- Automatic mounting by taping and IR reflow (lead-free) are possible.
- Lead-free.
- Compact and light. Dimensions and weight: 5.0 x 3.2 mm, 1.0 mm, and 0.06 g.

Pb Free

RoHS Compliant
Directive 2002/95/EC

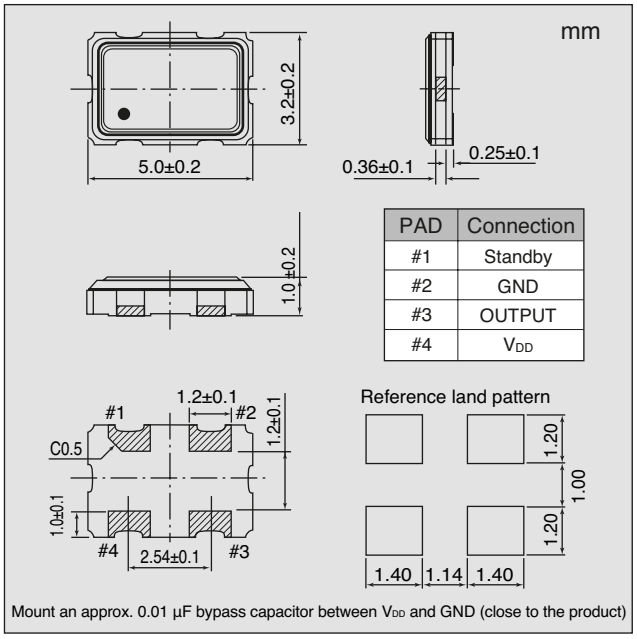
Absolute maximum rating
Power supply voltage (V_{DD}) -0.5 to +7.0 V
Storage temperature range -55 to +125 °C

■ Specifications

Item		Model	2725T					
Output level			C-MOS					
Frequency range *1		(MHz)	2.5 ≤ F < 20	20 ≤ F < 40	40 ≤ F < 60	60 ≤ F < 75	75 ≤ F < 100	100 ≤ F ≤ 125
Operating temperature range *2		(°C)	–20 to +70					
Frequency stability		(×10^{-6})	±100					
Power supply voltage [V_{DD}]		(V)	+3.3±0.3					
Current consumption	During operation	(mA)	8	15	22	25	35	40
(+3.3 V, 25 °C) max	During standby	(µA)	10					
V_{OL} max/V_{OH} min		(V)	0.1 V_{DD}/0.9 V_{DD}				0.2 V_{DD}/0.8 V_{DD}	
Tr max/Tf max		(ns)	5/5 (0.1 V_{DD} to 0.9 V_{DD})				3/3 (0.2 V_{DD} to 0.8 V_{DD})	
Duty Cycle min. to max.		(%)	45 to 55 (at 1/2 V_{DD})					
Load (C_L) max		(pF)	15					
Oscillation start time max		(ms)	4		10			
Standby function			Available (tristate)					
Number for specifying an order			NSA6293A					

*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.

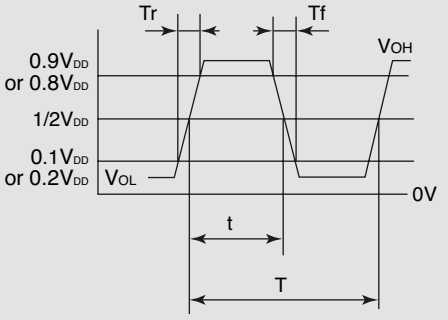
■ Dimensions



PAD	Connection
#1	Standby
#2	GND
#3	OUTPUT
#4	V_{DD}

Mount an approx. 0.01 µF bypass capacitor between V_{DD} and GND (close to the product)

■ Output Waveform <C-MOS>



Duty Cycle = t/T × 100 [%]

■ Standby Function

#1 Input	#3 Output
Level H (0.7 V_{DD} ≤ V_{IH} ≤ V_{DD}) or OPEN is selected.	Oscillation output ON
Level L (V_{IL} ≤ 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

Example 1: When ordering a product with model name: 2725T, frequency: 125 MHz, frequency stability: ±100 x 10^{-6}, and power supply voltage: 3.3 V
Ordering Code: 2725T – 125.000000M – NSA6293A

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/).