

Crystal Clock Oscillator

2725 Series

Super Wide Operating Temperature Range Type

■ Model name

2725T Frequency stability of $\pm 100 \times 10^{-6}$
(Super Wide Operating Temperature Range Type).

■ Application

- Automobile navigation system, automobile audio equipment, and camera

■ Features

- Supports a wide temperature range from -40 to +105°C.
- 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.
- Conforms to AEC-Q200.

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

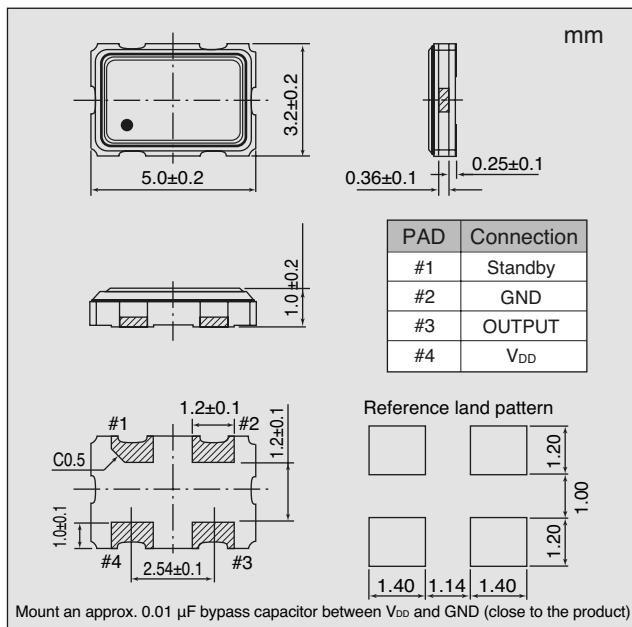


■ Specifications

Item	Model	2725T			
Output level		C-MOS			
Frequency range ¹⁾	(MHz)	2.5 ≤ F < 20	20 ≤ F < 40	40 ≤ F < 60	60 ≤ F ≤ 75
Operating temperature range ²⁾	(°C)			-40 to +105	
Frequency stability	($\times 10^{-6}$)			±100	
Power supply voltage [V_{DD}]	(V)			+3.3±0.1	
Current consumption	During operation (mA)	8	15	22	25
(+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}	
T_r max/ T_f max	(ns)			5/5 (0.1 V_{DD} to 0.9 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				NSA6293F	

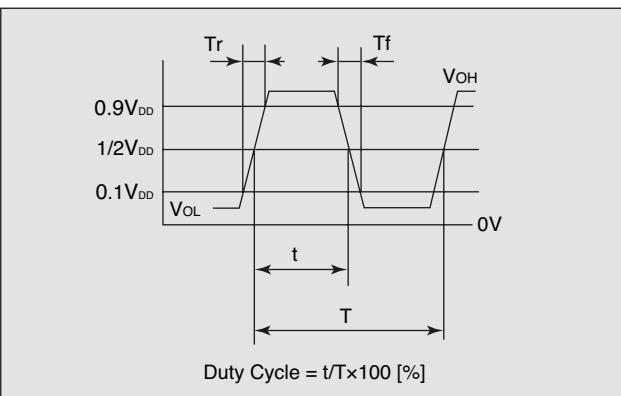
*1: If you require a product with a frequency not given above, please contact us. *2: If you require a product with an operating temperature range not given above, please contact us.

■ Dimensions



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

■ Output Waveform <C-MOS>



■ 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]

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: 2725T, frequency: 20 MHz, frequency stability: $\pm 100 \times 10^{-6}$, and power supply voltage: 3.3 V
Ordering Code: 2725T - 20.000000M - NSA6293F